NAVAL ISOTOPE APPLICATIONS: A SELECTED BIBLIOGRAPHY

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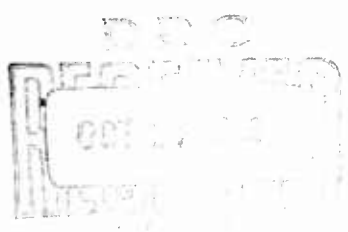

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Compiled by

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ABSTRACT

Publications on radioisotope applications are listed. Emphasis is placed on possible radioisotope uses for naval civil engineering in construction, facility and equipment maintenance, harbor engineering, engineering surveys, and engineering research.

INTRODUCTION

The objectives of this task are to adapt and develop radioisotope applications for use in the Naval Shore Establishment. In compiling this bibliography, applications were sought which might reduce costs, improve efficiency and quality control, and open new fields for the Naval Shore Establishment with its large industrial complexes and fleet support facilities.

This literature search was conducted to determine current radioisotope applications in industry and to determine which are most applicable for Navy use. Only applications for the areas of responsibility of the Bureau of Yards and Docks are included. Emphasis is placed on possible radioisotope uses for naval civil engineering in construction, facility and equipment maintenance, harbor engineering, engineering surveys, and engineering research. The applications of radioisotopes as heat sources are not included since a separate task (Y-F015-12-405) is being conducted to study those applications.

Of the applications included in the bibliography, the following seem to be the most feasible for use by the Bureau of Yards and Docks.

improvement, measurement, and control of the mechanical properties of materials
non-destructive testing of materials
flaw detection in welds
measurement of the thickness of materials and the thickness of coatings
measurement of the moisture in materials
measurement and control of density
measurement of the concentration of solutions
study of sulfate corrosion of concrete
nuclear batteries
control of Marine-Borer damage
leak detection
tracing the movement of water in a porous media
tracing ground water movement
wear studies of machinery parts
liquid level gauges
measurement and control of fluid flow
sewage tracing and treatment
tracers for lubrication research
tracers for studying transport of solids in watercourses
measurement of sand transport
measurement of canal seepage
measurement of the humidity of building materials
well logging

small power source
small light source
measurement of air movement in buildings
saline water conversion
surface area measurements of powdered material
vacuum gauging
dating marine sediments

The primary sources of this bibliography are: NUCLEAR SCIENCE ABSTRACTS, May 1960 to April 1963; REPORT BIBLIOGRAPHY ON INDUSTRIAL APPLICATIONS OF RADIOACTIVE AND STABLE ISOTOPES (ARB-6122), U. S. Armed Services Technical Information Agency, Arlington Hall Stn., Arlington 12, Va., 26 April 1963; and INDUSTRIAL USES OF ISOTOPES, CHEMICAL REACTION MECHANISMS AND KINETICS, AND RADIOCHEMISTRY; A SELECTED LIST OF REFERENCES (TID-3079), by J. A. McCormick, U. S. Atomic Energy Commission Technical Information Service, Sept. 1959.

1. THE USE OF NICKEL-63 AS RADIOACTIVE INDICATOR. Jean-Pierre Adloff and Madeleine Bacher (Centre de Recherches Nucleaires, Strasbourg). Bull. soc. chim. France, 1321-3(July 1961). (In French)

2. PRIMENENIE RADIOAKTIVNYKH IZLUCHENII V IZMERITEL'NOI TEKHNIKE. (Application of Radioactivity in Measuring Techniques). N. I. Shteinbok. Moscow and Leningrad, State Scientific-Technological Publishing House of Literature on Machine Construction, 1960. 288p.

3. (WAPD-BT-23(p.83-92)) A RADIOGRAPHIC METHOD OF DETERMINING COLLAPSE VELOCITY IN FLAT PLATE FUEL ASSEMBLIES. J. M. Shallenberger (Westinghouse Electric Corp. Bettis Atomic Power Lab., Pittsburgh).

4. (ARF-1194-2) LITERATURE SURVEY ON WORLD ISOTOPE AND RADIATION TECHNOLOGY. Interim Report No. 1, Covering the Period from June 15, 1961 to August 14, 1961. J. W. Haffner and D. Oestreich (Illinois Inst. of Tech., Chicago. Armour Research Foundation). Aug. 14, 1961. Contract AT(11-1)-578. 40p.

5. (NP-tr-798) INDUSTRIAL ASPECTS OF ISOTOPE APPLICATIONS. H. Krauch. Translated by E. K. Morrison (U.K.A.E.A. Atomic Energy Research Establishment, Harwell, Berks, Eng.) from Kerntechnik, 3: 4-7(1961). 15p.

6. (AEC-tr-4505) INVESTIGATION OF THE STRUCTURE OF METALS BY RADIOACTIVE ISOTOPE METHODS. S. Z. Bokshtein, S. T. Kishkin, and L. M. Moroz. Translation of "Issledovanie Stroeniya Metallov Metodom Radioaktivnykh Izotopov" (a publication of the State Publishing House of the Ministry of Defence Industry, Moscow, 1959). 212p.

7. (AD-255907) PHYSICAL PROPERTIES OF IRRADIATED POLYETHYLENE (thesis). Floyd Blue Sweet, Jr. (North Carolina State Coll., Raleigh). 1961. 36p.

8. (CEA-tr-R-1395) VARIATION DE COLORATION ET DE TRANSLUCIDITE DES VERRES, PAR SUITE DE LEUR IRRADIATION PAR DES RAYONNEMENTS γ (SOURCE DE ^{60}CO) ET DE LEUR IRRADIATION DANS UN REACTEUR NUCLEAIRE. (Color and Transparency Changes in Glasses Under Action of Co^{60} and Nuclear Reactor Radiation). S. M. Brekhovskikh. Translated into French by A. Lopoukhine from Atomnaya Energ., 8: 37-43(1960). 21p. (Includes original, 7p.).

9. (ARF-1122-27) ISOTOPIC SOURCES OF SECONDARY RADIATION. Final Report. I. Filosofo (Illinois Inst. of Tech., Chicago. Armour Research Foundation). Feb. 1, 1961. Contract AT(11-1)-657. 131p.

10. (ANL-6421) RADIOISOTOPE TECHNIQUES FOR CHEMICAL, PHYSICAL, AND INDUSTRIAL APPLICATIONS. Andrew J. Cassell (Argonne National Lab., Ill.). Sept. 1961. Contract W-31-109-eng-38. 85p.

11. (AERE-BIB-127 (Suppl. 1)) LIST OF UNCLASSIFIED REPORTS AND PAPERS PUBLISHED BY STAFF OF THE ISOTOPE RESEARCH DIVISION FROM SEPTEMBER 1959 TO AUGUST 1961. R. J. Millett and R. Sweeney, comps. (United Kingdom Atomic Energy Authority. Research Group. Isotope Research Div., Wantage, Berks, England). Sept. 1961. 24p.

12. (NP-10712) PORADNIK DEFEKTOSKOPII IZOTOPOWEJ. (Guide for the Isotope Defectoscope). Wladyslaw Listwan and Marek Dobrowolski (Poland. Biuro Urzadzen Techniki Jadrowej, Warsaw). [nd.] 62p.

13. (BMI-X-179) RADIOISOTOPE AND RADIATION APPLICATIONS; QUARTERLY PROGRESS REPORT. SECTION I. USE OF INTRINSIC RADIOACTIVE TRACERS FOR PROCESS CONTROL. James L. McFarling, Peter Gluck, John F. Kircher, and Duane N. Sunderman. SECTION II. RADIATION-INDUCED GRAFT-POLYMERIZATION STUDIES. Francis A. Sliemers, Manfred Luttinger, Emir Guelbaran, William B. Gager, Robert Lieberman, John F. Kircher, and Robert I. Leininger (Battelle Memorial Inst., Columbus, Ohio). Oct. 23, 1961. Contract W-7405-eng-92. 17p.

14. (NP-10946) ANALIZA IZOTOPOWYCH METOD POMIAROWYCH I REGULACJI WIELKOSCI FIZYCZNYCH. (Isotopic Analysis Measurement and Regulation). Jerzy Czarnecki and Stanislaw Kowalik (Poland. Biuro Urzadzen Techniki Jadrowej, Warsaw). [nd]. 72p.

15. (TID-14226) RADIOISOTOPES RESEARCH, DEVELOPMENT, AND RELATED ACTIVITIES. Quarterly Progress Report No. 11, June 15, 1961 to September 15, 1961. (Chicago. Univ. Labs. for Applied Science). Contract AT(11-1)-712. 37p.

16. RADIOACTIVE ISOTOPES. P. F. Berry (Wantage Research Labs., Berks, Eng.). Brit. Power Eng., 3: No. 4, 40-5(Sept. 1961).

17. (NP-10969) EFFECTS OF NUCLEAR RADIATION ON THE OPTICAL, ELECTRICAL AND THERMOPHYSICAL PROPERTIES OF SOLIDS: AN ANNOTATED BIBLIOGRAPHY. Robert C. Gex, comp. (Lockheed Aircraft Corp. Missiles and Space Div., Sunnyvale, Calif.). Aug. 1961. Contract AF04(647)-673. 241p. (SB-61-42)

18. IMPROVEMENTS IN OR RELATING TO RADIATION THICKNESS GAUGES. George Syke and William Thomas James (to Baldwin Instrument Co., Ltd.). British Patent 882,729. Nov. 15, 1961.

19. POISKOVO-RAZVEDOCHNAYA RADIOMETRICHESKAYA APPARATURA. (Radiometric Equipment for Prospecting and Surveying). A. L. Yakubovich. Moscow, State Publishing House of Scientific and Technical Literature on Geology and Ore Conservation, 1960. 206p.

20. (TID-7615(p.90-101)) RADIOMETRIC ASSAY BY PRECISION CALORIMETRY. W. L. Pillinger (Du Pont de Nemours (E. I.) & Co. Savannah River Lab., Aiken, S. C.).

21. (JPRS-9706(p.79-80)) FLAW DETECTION IN WELDS AND METAL ARTICLES. R. S. Belova and E. (Ye.) L. Sheftel. (Translation).

22. (BMI-1553) USE OF INTRINSIC RADIOTRACERS FOR INDUSTRIAL PROCESS CONTROL. James L. McFarling, Peter Gluck, John F. Kircher, and Duane N. Sunderman (Battelle Memorial Inst., Columbus, Ohio). Nov. 9, 1961. Contract W-7405-eng-92. 57p.

23. (MND-P-2581-1) ISOTOPIC POWER SOURCES. A COMPENDIUM. Property and Processes Review. E. H. Smith, comp. (Martin Co. Nuclear Div., Baltimore). June 1961. Contract AT(30-3)-217. 342p.

24. (AEC-tr-4497) TRANSACTIONS OF THE ALL-UNION SCIENTIFIC TECHNICAL CONFERENCE ON THE USE OF RADIOACTIVE AND STABLE ISOTOPES AND RADIATIONS IN THE NATIONAL ECONOMY AND IN SCIENCE, APRIL 4-12, 1957. ISOTOPES AND RADIATION IN CHEMISTRY. Translation of Trudy Vsesoyuz. Nauch.-Tekh. Konf. po Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Izotopy i Izlucheniya v Khim. 480p.

25. (AEC-tr-4497(p.243-50)) USE OF RADIOACTIVE ISOTOPES FOR TESTING AND DEVELOPMENT OF THE ANALYSIS METHODS OF NON-FERROUS METALS AND METALLURGICAL DUST. M. I. Troitskaya, E. N. Artemova, and A. M. Zaraiskii. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. po Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Izotopy i Izlucheniya v Khim., p.197-202.

26. (AEC-tr-4497(p.251-60)) APPLICATION OF RADIOACTIVE ISOTOPES FOR SOLVING THE PROBLEMS OF PURIFICATION OF INORGANIC SALTS BY CRYSTALLIZATION AND PRECIPITATION. G. I. Gorshtein and N. I. Silant'eva. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. po Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Izotopy i Izlucheniya v Khim., p.203-10.

27. (AEC-tr-4497(p.261-9)) APPLICATION OF RADIOACTIVE ISOTOPES IN THE DEVELOPMENT PROCESSES FOR THE PREPARATION AND PURIFICATION OF CHEMICAL REAGENTS. G. V. Abramova, G. I. Gorshtein, R. E. Gurevich, and A. M. Kheimets. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. po Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Izotopy i Izlucheniya v Khim., p.211-17.

28. (FTD-TT-61-72) ATOMIC BATTERIES. Kliment Soler. Translated from Pokroky mat., fys. a astron., 6: No. 1, 15-23(1961). 15p.

29. (AEC-tr-4497(p.297-307)) INVESTIGATION OF THE SUBLIMATION PROCESS OF TELLURIUM BY THE USE OF RADIOACTIVE TRACERS. A. S. Pashinkin, A. A. Men'kov, I. V. Korneeva, and A. V. Novoselova. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. po Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Izotopy i Izlucheniya v Khim., p.238-45.

30. (AEC-tr-4497(p.308-19)) USE OF RADIOACTIVE SELENIUM FOR THE INVESTIGATION OF THE SULFUR-SELENIUM SYSTEM. O. V. Al'tshuler, G. N. Zviadadze, and D. M. Chizhikov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. po Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Izotopy i Izlucheniya v Khim., p.246-54.

31. SOME ACHIEVEMENTS AND POSSIBILITIES OF THE USE OF RADIOACTIVE ISOTOPES AND OF NUCLEAR RADIATIONS IN THE SOVIET INDUSTRY AND SCIENTIFIC RESEARCH. P. L. Gruzin. Atomnaya Energ., 11: 379-94(Oct. 1961). (In Russian)

32. FUTURE ASPECTS OF THE INDUSTRIAL USE OF ISOTOPES IN GREAT BRITAIN. H. Sheard (United Kingdom Atomic Energy Authority, Radiochemical Centre, Amersham, Eng.). Atomwirtschaft, 6: 477-9(Oct. 1961). (In German)

33. NEW TECHNICAL ISOTOPE APPLICATIONS IN FRANCE. C. Fisher (Centre d'Etudes Nucleaires, Saclay, France). Atomwirtschaft, 6: 479-82(Oct. 1961). (In German)

34. RADIOCHEMICAL DETERMINATION OF RADIONUCLIDES IN WATER. A COMPILATION OF RADIOCHEMICAL ANALYSIS PROCEDURES. H. Schroeder (Kernforschungszentrum, Karlsruhe, Ger.). Atompraxis, 7: 426-33(Nov. 1961).

35. (TG-230-T256) INTROSCOPY--[FLAW DETECTION]. L. Dun, G. Lushnikov, and A. Yakobson (Iakobson). Translated by B. W. Kuvshinoff (Johns Hopkins Univ., Silver Spring, Md.) from Znanie-Sila, No. 11, (1960). 7p.

36. (MND-2584) RADIOISOTOPE SEMICONDUCTOR AND THERMOELEMENT RESEARCH AND DEVELOPMENT QUARTERLY PROGRESS REPORT NO. 1, FEBRUARY 13 TO MAY 31, 1961. J. B. Weddell (Martin Co. Nuclear Div., Baltimore). June 27, 1961. Contract AT(30-1)-2698. 66p.

37. THE AECL RADIOISOTOPE APPLICATIONS HANDBOOK. (Atomic Energy of Canada Ltd. Commercial Products Div., Ottawa). [1961]. 54p. (AECL-1396)

38. (NP-11172) USE OF URANIUM TO CONTROL MARINE-BORER DAMAGE. Progress Report No. 1. (British Columbia Research Council, Vancouver). July 14, 1961. For Canadian Uranium Research Foundation, Toronto. 8p. (CURF-R-13)

39. ALLOY COMPOSITION ANALYSIS USING RADIOISOTOPE-EXCITED X-RAYS. C. A. Ziegler and J. C. McCue (Tracerlab Inc., Waltham, Mass.). Intern. J. Appl. Radiation and Isotopes, 12: 1-5(Nov. 1961). (In English)

40. NEUTRON MEASUREMENT OF SURFACE SOIL MOISTURE. C. H. M. van Bavel (U. S. Water Conservation Lab., Tempe, Ariz.). J. Geophys. Research, 66: 4193-8 (Dec. 1961).

41. RADIATION FUEL GAUGE. Donald Franklin Howard (to North American Aviation, Inc.). British Patent 885,102. Dec. 20, 1961.

42. LEAK DETECTION USING Kr^{85}. P. F. Berry and J. F. Cameron (Wantage Research Lab., Berks, Eng.). Intern. J. Appl. Radiation and Isotopes, 12: 69(Nov. 1961). (In English)

43. RADIOACTIVE TRACER DETERMINATION OF THE DISCHARGE AND RATE OF MOVEMENT OF WATER IN POROUS MEDIA. M. P. Volarovich, N. I. Il'in, and N. V. Churaev (Kalinin Peat Inst., USSR). Kolloid. Zhur., 23: 524-7 (Sept.-Oct. 1961). (In Russian)

44. RADIOTRACER METHOD OF DETERMINING THE ADSORPTIVE CAPACITY AND SPECIFIC SURFACE AREA OF PHOSPHATE COATINGS. V. S. Lapatukhin and Yu. M. Ovchinnikov (Scientific Research Inst., Polygraphic Industry, Moscow). Kolloid. Zhur., 23: 592-5(Sept.-Oct. 1961). (In Russian)

45. BASIC PRINCIPLES OF THE TRACER METHOD. Introduction to Mathematical Tracer Kinetics. C. W. Sheppard. New York, John Wiley & Sons, Inc., 1962. 295p.

46. (JPRS-10613(Pt.II) (p.409-40)) PREPARATION OF RADIOACTIVE AND STABLE ISOTOPES. A NEW DOMAIN OF CHEMICAL TECHNOLOGY. Hu. S. Frolov, V. V. Bochkarev, I. F. Tupitsyn, and R. L. Globus. (Translation).

47. (JPRS-11691) THE PRESENT STATE AND POSSIBILITIES OF USING RADIOACTIVE ISOTOPES IN HUNGARY. Pal Tetenyi. Translated from Magyar Tudomany, 68: 455-66(July-Aug. 1961). 15p.

48. POSSIBILITY OF USING A NATURAL URANIUM SOURCE AS β EMITTER (UX_2) FOR THICKNESS MEASUREMENTS IN TESTS IN INDUSTRIAL LABORATORIES. Rafael Perez del Viso (Universidad Nacional del Litoral, Santa Fe, Argentina). Rev. soc. quim. Mex., 5: 184-8(Sept. 1961). (In Spanish)

49. USE OF RADIOISOTOPES FOR TESTING REINFORCED CONCRETE. Karl Heinz Lucke (Institut fur Baustoffe, Weimar, [Ger.]). Silikat Tech., No. 12, 562-3(1960).

50. KERN- UND RADIOCHEMIE. GRUNDLAGEN PRAKTISCHE METHODEN UND TECHNISCHE ANWENDUNG. (Nuclear and Radio Chemistry. Fundamentals, Practical Methods, and Technical Application). Roland Lindner. Berlin, Springer-Verlag, 1961. 378p. DM

51. IMPROVEMENTS IN RADIATION GAUGE. (to General Electric Co.). British Patent 886,634. Jan. 10, 1962.

52. (TID-14742) RADIOISOTOPE TECHNOLOGY. Manual for AEC-NSF Institute. Lloyd E. Brownell (Michigan. Univ., Ann Arbor). June 1961. Contract [AT(11-1)-975]. 574p.

53. (HW-66600) IONIUM, URANIUM-232, AND THORIUM-228 PROPERTIES, APPLICATIONS AND AVAILABILITY. Charles A. Rohrmann (General Electric Co. Hanford Atomic Products Operation, Richland, Wash.). Aug. 1, 1960. Contract [AT(45-1)-1350]. 31p.

54. (RAI-200) THE TECHNOLOGY AND APPLICATIONS OF LARGE FISSION PRODUCT BETA SOURCES. Quarterly Report for the Period October 1 to December 31, 1961. Jacques J. Weinstock, Ella Y. Microcznik, and Kenneth D. Ziegel (Radiation Applications Inc., Long Island City, N. Y.). Jan. 18, 1962. Contract AT(30-1)-2186. 50p.

55. (JLI-650-5-2) TRAINING SYSTEMS IN RADIOCHEMISTRY AND RADIOISOTOPE ENGINEERING. (Johnston (William H.) Labs., Inc., Baltimore). Apr. 10, 1961. Contract AT(11-1)-650. 39p.

56. THE RESOLVING POWER OF MICRORADIOAUTOGRAPHIE EXPOSURES AND ITS DEPENDENCE UPON THE ENERGY OF THE BETA RADIATION. PART II. W. Herrmann, G. Hartmann, and R. Brust (Institut fur Angewandte Radioaktivitat, Leipzig). Atompraxis, 8: 8-11 (Jan. 1962). (In German)

57. RADIOISOTOPE CATALOGUE. (Israel. Atomic Energy Commission, Rehovoth). Oct. 1961. 39p.

58. INVESTIGATION OF THE MECHANISM OF WEAR OF WIRE DRAWING DIES BY THE RADIOACTIVE TRACER METHOD. P. F. Groshev. Tsvetnye Metally, 34: No. 3, 71-5(1961).

59. (AEC-tr-4627) TRACKING OF GROUND WATER MOVEMENT BY MEANS OF RADIOACTIVE ISOTOPES. Ede Vessey. Translated from Hidrol. Kozlony, 38: 338-42(1958). 16p. (Includes original, 5p.).

60. RADIOACTIVITY IN THE SURFACE WATERS OF TEXAS. E. F. Golyna, W. R. Drynan, and D. F. Smallhorst. Southwest Water Works J., 43: No. 5, 31-5(Aug. 1961).

61. (ARF-1194-7) LITERATURE SURVEY ON WORLD ISOTOPE AND RADIATION TECHNOLOGY. First Semi-Annual Report Covering Period from June 15, 1961 to December 14, 1961. J. W. Haffner and D. Oestreich (Illinois Inst. of Tech., Chicago. Armour Research Foundation). Jan. 10, 1962. Contract AT(11-1)-578. 50p.

62. SOME BREMSSTRAHLUNG SOURCES IN THICKNESS GAGES. Tadeusz Florkowski (Academy of Mining and Metallurgy, Krakow). Nukleonika, 6: 779-85(1961). (In Polish)

63. CHEMICAL EFFECTS FROM THE IRRADIATION OF WOOD. J. L. Garnett (Univ. of New South Wales, Sydney) and J. W. T. Merewether. p.76-81 of "The Technological Use of Radiation, 1960." Australia, Atomic Energy Commission.

64. (SRO-54) APPLICATIONS OF COMPTON BACKSCATTER RADIATION TO NON-DESTRUCTIVE TESTING. Final Report. J. H. Tolan, C. T. Bradshaw, and K. E. Mears (Lockheed Georgia Co., Marietta, Ga.). Sept. 1961. Contract AT(30-1)-2429. 97p. (NR-130)

65. RADIOGRAPHY, ITS PURPOSES AND PRACTICES. R. C. Barry (Atomics International, Canoga Park, Calif.). Metal Progr., 81: No. 3, 100-5; 130; 132; 134; 136; 138(Mar. 1962).

66. (BMI-X-189) RADIOISOTOPE AND RADIATION APPLICATIONS. Quarterly Progress Report. Duane N. Sunderman, ed. (Battelle Memorial Inst., Columbus, Ohio). Jan. 18, 1962. Contract W-7405-eng-92. 20p.

67. ATOMIC ENERGY IN THE RUBBER AND PLASTICS INDUSTRIES. R. Roberts (Wantage Research Lab., Berks, Eng.). Nuclear Energy, 62-7(Feb. 1962).

68. RADIATION AND MONOMERS IMPROVE PROPERTIES OF WOOD. Nucleonics, 20: No. 3, 94(Mar. 1962).

69. (DC-58-4-54) WATER-AIR BOUNDARY DOSE RATE MEASUREMENTS USING A COBALT-60 SOURCE. V. J. Mitchell and R. B. Smith (General Electric Co. Aircraft Nuclear Propulsion Dept., Cincinnati). Apr. 7, 1958. Contract AT(11-1)-171. 18p.

70. (NP-11409) USE OF URANIUM TO CONTROL MARINE-BORER DAMAGE. Progress Report No. 2 Covering Period August to October 1961. J. Schlabitz and C. C. Walden (British Columbia Research Council, Vancouver). Nov. 22, 1961. For Canada Uranium Research Foundation, Toronto. 25p. (CURF-R-22)

71. NOVEL THICKNESS GAUGES. J. Guizerix (Centre d'Etudes Nucleaires, Grenoble, France). Kerntechnik, 3: 534-6(Dec. 1961). (In German)

72. (MLM-1127) NUCLEAR BATTERY-THERMOCOUPLE TYPE SUMMARY REPORT. B. C. Blanke, J. H. Birden, K. C. Jordan, and E. L. Murphy (Mound Lab., Miamisburg, Ohio). Oct. 1, 1960. Contracts AT(33-1)-GEN-53 and R-65-8-99811-SC-03-91. 68p.

73. (MND-P-2613) FINAL SAFETY ANALYSIS; TEN-WATT STRONTIUM-90 FUELED GENERATOR FOR AN UNATTENDED LIGHT BUOY, SNAP-7A. (Martin Co. Nuclear Div., Baltimore). [1961]. Contract AT(30-3)-217. 51p.

74. (MND-P-2614) FINAL SAFETY ANALYSIS; TEN-WATT STRONTIUM-90 FUELED GENERATOR FOR AN UNATTENDED METEOROLOGICAL STATION. SNAP-7C. Phillip M. Brooks (Martin Co. Nuclear Div., Baltimore). [1961]. 51p.

75. (NP-11380) MESURE EN PROFONDEUR DE LA TENEUR EN EAU DES SOLS PAR RELENTISSEMENT DES NEUTRONS RAPIDES. (Measurement of the Depth and Content of Water of Soils by Slowing-Down of Fast Neutrons). C. Andrieux, L. Buscarlet, J. Guitton, and B. Merite (France. Commissariat a l' Energie Atomique. Centre d'Etudes Nucleaires, Saclay). 1962. 55p.

76. (NYO-9853) INVESTIGATION OF RADIOISOTOPE TECHNIQUES FOR ATMOSPHERIC DENSITY MEASUREMENTS AND THE DEVELOPMENT OF A DEVICE. Task Summary Report on Phase 1, June-December 1961. (Parametrics, Inc., Saxonville, Mass.). Jan. 30, 1962. Contract AT(30-1)-2795. 81p.

77. RADIOISOTOPES IN PRODUCTION ENGINEERING. W. G. Busbridge. Production Engineer, 40: 468-73 (July 1961).

78. REFRACTORIES, RADIOISOTOPES AND NONMETALLIC INCLUSIONS IN STEEL. Refrattari, No. 11, 367-9(Apr. 1961).

79. USE OF RADIOACTIVE TRACERS IN THE INVESTIGATION OF DRAWING DIE WEAR. P. F. Groshev. Tsvetnye Metally, 34: 71-5(Mar. 1961).

80. THE USE OF RADIOACTIVE ISOTOPES IN ENGINEERING. K. Detzer (Isotope-Studiengesellschaft e. V., Frankfurt am Main). VDI Zeitschrift, 104: 182-5(Feb. 1, 1962). (In German)

81. (AERE-EL/M-97) AN INVESTIGATION OF THE POSSIBILITY OF USING A NEUTRON SOURCE TO MEASURE THE SPECIFIC GRAVITIES OF STEAM-WATER MIXTURES IN A THICK PIPE. J. A. Dennis (United Kingdom Atomic Energy Authority. Research Group. Atomic Energy Research Establishment, Harwell, Berks, England). Sept. 1957. 24p.

82. (TID-6613(Suppl.2)) RADIOISOTOPES IN WORLD INDUSTRY. Abstracts of Selected Foreign Literature. (Division of Isotopes Development, AEC). Jan. 1962. 133p.

83. (AEC-tr-4492) TRANSACTIONS OF THE ALL-UNION SCIENTIFIC TECHNICAL CONFERENCE ON THE USE OF RADIOACTIVE AND STABLE ISOTOPES AND RADIATIONS IN THE NATIONAL ECONOMY AND IN SCIENCE, APRIL 4-12, 1957. MACHINE BUILDING AND INSTRUMENT MAKING. (Trudy Vsesoyuznoi Nauchno-Tekhnicheskoi Konferentsii po Primeneniyu Radioaktivnykh i Stabil'nykh Izotopov i Izluchenii v Narodnom Khozyaistve i Nauke, Aprel 4-12, 1957. Mashinostroenie i Priborostroenie). Translated from a publication of the Publishing House of the Academy of Sciences U.S.S.R., Moscow, 1958. 405p.

84. (AEC-tr-4492)p.1-5)) THE APPLICATION OF RADIOACTIVE ISOTOPES IN MACHINE BUILDING. V. I. Dikushin. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.3-7.

85. (AEC-tr-4492(p.20-7)) A STUDY OF THE BEHAVIOR OF A SULFIDED LAYER IN THE PROCESS OF DETERIORATION. V. E. Vainshtein and Yu. M. Vinogradov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.19-25.

86. (AEC-tr-4492(p.28-34)) A STUDY OF THE TRANSFER OF METALS DURING FRICTION AND DETERIORATION. G. M. Zamoruev (Zamoruyev) and Ya. N. Levin. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.26-31.

87. (AEC-tr-4492(p.48-52)) THE RELATIONSHIP BETWEEN THE DETERIORATION OF A DIESEL ENGINE'S UPPER PISTON RING AND CYLINDER BUSH AND THE ENGINE SPEED AND THE MAXIMUM PRESSURE OF THE CYCLE. M. D. Nikitin. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.43-6.

88. (AEC-tr-4492(p.53-8)) A STUDY OF THE EFFECT OF DUST UPON THE DETERIORATION OF THE PARTS OF A TRACTOR MOTOR. A. I. Nisnevich. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Mashinostr. i Priborostr., p.47-51.

89. (AEC-tr-4492(p.59-68)) THE REDUCTION OF THE LOW-TEMPERATURE DETERIORATION OF THE CYLINDER-PISTON GROUP IN ENGINES WITH THE USE OF OIL ADDITIVES. Yu. S. Zaslavskii, G. I. Shor, and I. A. Morozova. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Mashinostr. i Priborostr., p.52-60.

90. (AEC-tr-4492(p.69-75)) A STUDY OF THE MECHANISM OF THE ACTION OF ANTICORROSIVE ADDITIVES TO OILS. Yu S. Zaslavskii, S. E. Krein, R. N. Shneerova, and G. I. Shor. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.61-6.

91. (AEC-tr-4492(p.76-81)) A STUDY OF THE MECHANISM OF THE REACTION OF OIL ADDITIVES WITH METALS. M. M. Kusakov, G. V. Vinogradov, E. A. Razumovskaya, P. I. Sanin, and A. V. Ul'yanova. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.67-72.

92. (AEC-tr-4492(p.82-7)) A STUDY OF THE DETERIORATION OF COGWHEELS IN COAL-MINING MACHINES. R. Ya. Studnits. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.73-7.

93. (AEC-tr-4492(p.88-91)) A STUDY OF THE DETERIORATION OF MEMBERS OF FEED UNITS IN AIRPLANE ENGINES. A. I. Yudin. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.78-81.

94. (AEC-tr-4492(p.92-5)) AN AUTOMOBILE ROAD LABORATORY FOR STUDYING THE EFFECT OF THE DUST CONTENT OF AIR AND THE QUALITY OF THE AIR PURIFIER ON THE DETERIORATION OF THE ENGINE'S PISTON RINGS. D. I. Vysotskii, G. I. Beloglazov, V. I. Golov, V. P. Kaznacheev, and Yu. G. Mochalov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.82-5.

95. (AEC-tr-4492(p.96-8)) AN APPARATUS FOR STUDYING THE FORMATION OF FILMS ON FRICTION SURFACES. M. Melik-Zade. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.86-8.

96. (AEC-tr-4492(p.104-11)) A STUDY OF THE METAL-CUTTING PROCESS. N. F. Kazakov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.94-100.

97. (AEC-tr-4492(p.112-16)) STUDY OF THE DETERIORATION OF HARD ALLOY CUTTING TOOLS. B. D. Lazebnik. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.101-4.

98. (AEC-tr-4492(p.117-22)) STUDY OF THE DETERIORATION OF CUTTING TOOLS. G. M. Yakovlev. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.105-7.

99. (AEC-tr-4492(p.123-6)) A METHOD OF EVALUATING THE CLEARNESS OF DECREASED METALS. R. B. Chernyakova. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.108-11.

100. (AEC-tr-4492(p.127-34)) A STUDY OF THE PROCESSES OF SHAPING CASTINGS IN SAND MOLDS. B. B. Gulyaev, Yu. F. Borovskii, L. M. Postnov, and O. N. Magnitskii. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.112-18.

101. (AEC-tr-4492(p.135-9)) A STUDY OF THE MECHANISM OF THE BASIC PROCESSES OF HOT TIN-PLATING. A. I. Vitkin. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.119-23.

102. (AEC-tr-4492(p.173-8)) MEASUREMENT OF FLUID DENSITY WITH THE AID OF GAMMA RADIATION. G. G. Iordan and K. S. Furman. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.153-8.

103. (AEC-tr-4492(p.179-85)) A NEW TYPE OF RADIOACTIVE DENSIMETER. G. I. Birger, B. I. Verkhovskii, and E. Ya. Ovcharenko. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.159-64.

104. (AEC-tr-4492(p.186-95)) INDUSTRIAL APPARATUS FOR THE CONTROL OF DENSITY BY MEANS OF GAMMA RAYS. E. G. Kardash. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.165-73.

105. (AEC-tr-4492(p.196-204)) CALCULATION AND STUDY OF THE DENSITY OF IRON ORE PULP ON THE BASIS OF GAMMA-RAY ABSORPTION. A. K. Val'ter and M. L. Gol'din. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.174-81.

106. (AEC-tr-4492(p.205-6)) PROBLEMS OF GAMMA-RAY PULP-MEASURING DEVICES IN DREDGING APPARATUS. G. B. Vishnyak. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.182-3.

107. (AEC-tr-4492(p.207-13)) EXPERIENCE IN UTILIZING A GAMMA-RAY DENSIMETER DEVELOPED BY THE LENINGRAD PHYSICAL-TECHNICAL INSTITUTE, ACADEMY OF SCIENCES USSR. E. M. Lobanov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.184-9.

108. (AEC-tr-4492(p.214-16)) THE APPLICATION OF RADIATION IN INLAND WATER TRANSPORTATION. S. N. Dedyukov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.190-1.

109. (AEC-tr-4492(p.246-53)) A SCINTILLATION THICKNESS GAUGE FOR PIPES. E. G. Kardash. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Isotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.217-22.

110. (AEC-tr-4492(p.254-8)) MEASUREMENT OF THE CONCENTRATION OF SOLUTIONS BY MEANS OF BETA RADIATION. G. G. Iordan and T. G. Neiman. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957 (1958). Mashinostr. i Priborostr., p.223-6.

111. (AEC-tr-4492(p.259-66)) THE UTILIZATION OF THE BACKSCATTERING OF BETA RADIATION FOR THE CONTROL OF THE THICKNESS OF COATINGS. B. I. Ermolaev. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.227-33.

112. (AEC-tr-4492(p.267-8)) AN APPARATUS FOR MEASURING THE THICKNESS OF COATINGS. N. V. Yur'ev. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Isluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.234-5.

113. (AEC-tr-4492(p.269-73)) EXPERIENCE OF INTRODUCING APPARATUSES FOR MEASURING THE THICKNESS OF ROLLED IRON AND COATINGS. L. N. Baskin, A. M. Bogachev, L. A. Brodskii, B. I. Verkhovskii, A. N. Makarov, N. S. Novoshenya, and L. A. Rubinshtein. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.236-9.

114. (AEC-tr-4492(p.274)) THE UTILIZATION OF THICKNESS GAUGES AT THE "ZAPOROZHSTAL" PLANT. N. S. Novoshenya. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.240.

115. (AEC-tr-4492(p.292-5)) PORTABLE RADIOACTIVE LEVEL INDICATORS. K. K. Shpor and V. A. Yanushkovskii. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.255-7.

116. (AEC-tr-4492(p.307-10)) THE UTILIZATION OF RADIOACTIVE ISOTOPES FOR THE AUTOMATIC CONTROL OF THE RATE OF FLOW OF FLUIDS. N. N. Shumilovskii, Yu. V. Gushchin, and M. I. Tolckonnikov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.267-70.

117. (AEC-tr-4492(p.311-16)) THE USE OF SHORT LIVED ISOTOPES FOR CONTROLLING THE TECHNOLOGY OF THE PRODUCTION OF STEEL TAPE. V. V. Kryzhanovskii, I. I. Safyants, and V. A. Yanushkovskii. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.271-5.

118. (AEC-tr-4492(p.317-21)) THE USE OF RADIOACTIVE RADIATION FOR THE NONCONTACT CONTROL OF A GAS STREAM'S RATE OF FLOW AND VELOCITY. N. N. Shumilovskii and L. V. Mel'ttser. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.276-9.

119. (AEC-tr-4492(p.338-42)) THE UTILIZATION OF RADIOACTIVE ISOTOPES IN SAFETY TECHNIQUES. V. S. Medvedeva and I. S. Roizen. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.293-7.

120. (AEC-tr-4492(p.346-9)) DETERMINATION OF THE SITE OF GAS LEAKAGE FROM UNDERGROUND GAS MAINS. V. I. Kuznetsov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.301-3.

121. (AEC-tr-4492(p.374-8)) THE RADIOGRAPHY OF THE BUTT WELDS OF PIPES. S. T. Nazarov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.324-8.

122. (AEC-tr-4492(p.379-84)) GAMMASCOPY OF THIN-WALLED PARTS BY MEANS OF THE UTILIZATION OF THE ISOTOPE Tu^{170}. S. V. Rumyantsev. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.329-33.

123. (AEC-tr-4492(p.399-402)) THE USE OF SAFT RADIATION ISOTOPES FOR THE CONTROL OF WELDING IN SHIPBUILDING. O. N. Zhukov. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Knof. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.348-51.

124. (AEC-tr-4492(p.403-5)) EXPERIENCE OF THE APPLICATION OF THE ISOTOPE Ir^{192} AT THE RIGA SHIP REPAIR PLANT. V. O. Birshtenin. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957(1958). Mashinostr. i Priborostr., p.352-4.

125. (AECL-1469) CANADIAN INDUSTRY AND ATOMIC ENERGY. Address by J. L. Gray to Alumni Reunion, Banff School of Advanced Management, Banff, Alberta, March 16, 1962. (Atomic Energy of Canada Ltd., Chalk River, Ont.). 26p.

126. (NYO-9858) RADIOISOTOPES IN THE STUDY OF METAL-TO-METAL WEAR. H. Ezrol and G. Steven (Crucible Steel Co. of America. Central Research Lab., Pittsburgh). July 31, 1961. Contract AT(30-1)-2291. 22p.

127. (TID-15389) INVESTIGATION OF THE EFFECTS OF IONIZING RADIATION ON THE SEDIMENTATION OF SEWAGE. Fourth Quarterly Report. (Universal Match Corp. Armament Div., St. Louis). Mar. 1, 1962. Contract AT(11-1)-905. 62p. (UMC-B62-14)

128. THE PROBLEMS OF DETERMINING THE MOBILITY OF AN ION IN SOLID METALS BY MEANS OF RADIOACTIVE ISOTOPES. P. P. Kuz'menko (Kiev State Univ.). Ukrain. Fiz. Zhur., 6: 712-14(Sept.-Oct. 1961). (In Ukrainian)

129. RADIOISOTOPES IN THE PHYSICAL SCIENCES AND INDUSTRY. VOL. II. Proceedings of the Conference on the Use of Radioisotopes in the Physical Sciences and Industry held at Copenhagen, 6-17 September 1960. (International Atomic Energy Agency, Vienna). Proceedings Series. Jan. 1962. 561p. (STI/PUB/20(Vol.II)). $8.00 (IAEA).

130. RESEARCH APPLICATIONS OF BETA-PARTICLE TECHNIQUES: BACK-SCATTERING AND X-RAY EXCITATION. R. H. Mueller (Los Alamos Scientific Lab., N. Mex.). p.65-80 of "Radioisotopes in the Physical Sciences and Industry. Vol. II." Vienna, International Atomic Energy Agency, 1962. (In English)

131. RADIOACTIVE THICKNESS GAUGE. J. Guizerix (Centre d'Etudes Nucleaires, Grenoble, France). p.81-92 of "Radioisotopes in the Physical Sciences and Industry. Vol. II." Vienna, International Atomic Energy Agency, 1962. (In French)

132. RADIOACTIVE APPARATUS FOR MEASURING THE THICKNESS OF HOT SHEET-METAL. B. N. Vasichev, V. K. Latyshev, Yu. S. Plickin, and A. K. Felinger. p.93-107 of "Radioisotopes in the Physical Sciences and Industry. Vol. II." Vienna, International Atomic Energy Agency, 1962. (In Russian)

133. APPLICATION OF RADIOISOTOPES TO A GAS-CHROMATOGRAPHIC DETECTOR FOR DIRECT INDICATION OF CONCENTRATION. L. Wiesner, W. -J. Schmidt-Kuester, and G. R. Schultze (Institut fur Erdolforschung, Hanover). p.225-30 of "Radioisotopes in the Physical Sciences and Industry. Vol. II." Vienna, International Atomic Energy Agency, 1962. (In English)

134. RADIOISOTOPES IN THE PHYSICAL SCIENCES AND INDUSTRY. VOL. I. Proceedings of the Conference on the Use of Radioisotopes in the Physical Sciences and Industry held at Copenhagen, 6-17 September 1960. (International Atomic Energy Agency, Vienna). Proceedings Series. Jan. 1962. 549p. (STI/PUB/20(Vol.I)). $8.00 (IAEA).

135. APPLICATION OF RADIOISOTOPES TO STUDIES OF CRYSTAL IMPERFECTIONS. R. L. Sproull, G. A. Slack, M. Moss, R. O. Pohl, and J. A. Krumhansl (Cornell Univ., Ithaca, N. Y.). p.295-9 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

136. THE USE OF RADIOTRACER TECHNIQUES TO STUDY LUBRICATION AND WEAR IN LARGE DIESEL ENGINES. J. E. Howes, Jr., W. J. Braun, and D. N Sunderman (Battelle Memorial Inst., Columbus, Ohio). p.343-53 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

137. THE USE OF RADIOACTIVE TRACERS IN LUBRICATION AND WEAR RESEARCH. R. B. Campbell, L. Grunberg, A. A. Milne, and K. H. R. Wright (National Engineering Lab., Thorntonhall, Glasgow). p.355-68 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

138. METHODS OF INVESTIGATING THE OPERATIVE PROPERTIES OF LUBRICATING OILS WITH RADIOACTIVE TRACERS. Yu. S. Zaslavskii and G. I. Shor. p.369-80 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In Russian)

139. RADIOISOTOPIC CONTROL OF WEAR ON THE SUSPENSION BEARING OF LARGE TURBOGENERATORS. Z. Frynta, F. Khol (Kkhol), and V. Kopecky (Kopetskii) (State Scientific Research Inst. of Materials and Tech., Prague). p.381-5 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In Russian)

140. WEAR STUDIES IN THE SHEARING PROCESS BY MEANS OF IRRADIATED TOOLS. Toshio Sata, Kunio Abe, and Kiyoshi Nakajima (Inst. of Physical and Chemical Research, Tokyo). p.387-96 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

141. SOME RECENT DEVELOPMENTS IN THE APPLICATION OF RADIOISOTOPE TECHNIQUES IN AUSTRALIA. J. N. Gregory (Australian Atomic Energy Commission Research Establishment, Sutherland, N. S. W.). p.415-31 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

142. HIGH-DILUTION ON-STEAM ISOTOPIC TRACER TECHNIQUES. W. H. Johnston Labs., Inc., Baltimore). p.433-51 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

143. USE OF RADIOACTIVE TRACERS IN STUDYING THE TRANSPORT OF SOLIDS IN WATERCOURSES. G. Courtois (Centre d'Etudes Nucleaires, Saclay, France), P. Jaffry, and M. Heuzel. p.453-66 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In French)

144. THE USE OF Kr^{85} FOR THE MEASUREMENT OF LEAKS IN HERMETICALLY SEALED COMPONENTS. P. F. Berry (Wantage Research Lab., Berks, Eng.), J. F. Cameron, and E. J. Wilson. p.467-75 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

145. CONTINUOUS MEASUREMENT OF GAS FLOW USING A HINGER GATE AND A RADIOACTIVE SOURCE. C. G. Clayton and J. W. Webb (Wantage Research Lab., Berks, Eng.). p.499-509 of "Radioisotopes in the Physical Sciences and Industry. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

146. APPLICATION OF TRITIUM TRACER TO CANAL SEEPAGE MEASUREMENTS. W. J. Kaufman and D. K. Todd (Univ. of California, Berkeley). p.83-94 of "Tritium in the Physical and Biological Sciences. Vol. I." Vienna, International Atomic Energy Agency, 1962. (In English)

147. THE MEASUREMENT OF SAND TRANSPORT BY MEANS OF RADIOACTIVE TRACERS. M. J. Crickmore and G. H. Lean (Dept. of Scientific and Industrial Research, Wallingford, Berks, Eng.). Proc. Roy. Soc. (London), A266: 402-21(Mar. 20, 1962).

148. OBSERVATIONS ON PACKAGED Pm^{147} - ACTIVATED PHOSPHOR LIGHT SOURCES. A. Bradley (Associated Nucleonics, Inc., Garden City, N. Y.). Intern. J. Appl. Radiation and Isotopes, 13: 15-18(Jan. 1962). (In English)

149. THE APPLICATION OF RADIOISOTOPES IN SHIPBUILDING FOR NONDESTRUCTIVE MATERIAL TESTING. H. Gerlach. Schiffbautechnik, 12: 79-83(Feb. 1962).

150. A RADIOACTIVE TECHNIQUE FOR THE CONTINUOUS MEASUREMENT OF FILM THICKNESS IN VACUUM DEPOSITED GOLD FILMS. T. P. Flanagan and J. A. Bennett (British Scientific Instrument Research Assn., Chislehurst, Kent, Eng.). Intern. J. Appl. Radiation and Isotopes, 13: 19-26 (Jan. 1962). (In English)

151. RADIOAKTIVE STRAHLENQUELLEN IN DER TECHNIK. (Radioactive Radiation Sources in Engineering). Siegfried Koch. Leipzig, VEB Deutscher Verlag fur Grundstoffindustrie, 1960. 120p. DM 7.80.

152. (NP-11504) LIST OF PUBLICATIONS AVAILABLE TO THE PUBLIC. Cumulation No. 6, January-December, 1961. (United Kingdom Atomic Energy Authority. Research Group. Atomic Energy Research Establishment, Harwell, Berks, England). Mar. 1962. 112p.

153. (NP-11474) PIERWSZE KRAJOWE SYMPOZJUM ZASTOSOWAN IZOTOPOW W TECHNICE, ROGOW, 8-12 CZERWIEC, 1960. (First National Symposium on Technical Use of Radioisotopes, Rogow, June 8-12, 1960). (Poland. Biuro Pelnomocnika Rzadu do Spraw Wykorzystania Energii Jadrowej, Warsaw). 539p.

154. CONTINUOUS γ-RAY THICKNESS GAGE OPERATING WITH A SCINTILLATION COUNTER. Laszlo Barta, Janos Kakas, Mihaly Nagy, and Karoly Varga. Energia es Atomtech., 14: 570-5(Dec. 1961). (In Hungarian)

155. (ANL-6279) PROGRESS REPORT ON NEUTRON RADIOGRAPHY. H. Berger and W. J. McGonnagle (Argonne National Lab., Ill.). Feb. 1962. Contract W-31-109-eng-38. 32p.

156. GAMMA DEFECTOSCOPY. R. Fischer. Feingeratetechnik, 10: 498-9 (Nov. 1961).

157. (ARF-1194-10) LITERATURE SURVEY ON WORLD ISOTOPE AND RADIATION TECHNOLOGY. Quarterly Report, December 15, 1961 to March 14, 1962. J. W. Haffner and D. Oestreich (Illinois Inst. of Tech., Chicago. Armour Research Foundation). Apr. 11, 1962. Contract AT(11-1)-578. 14p.

158. (TID-4563(3rd Rev.)) SPECIAL SOURCES OF INFORMATION ON ISOTOPES. (Division of Isotopes Development, AEC). 1961. 99p.

159. RADIOACTIVE ISOTOPES IN ALUMINUM METALLURGY. D. De Voedroes. Met. constructia masini, No. 11, 1037-8(1960).

160. NUCLEAR BATTERIES. Kliment Soler. Pokroky mat., fys. a astron., No. 1, 15-23(1961).

161. (BMI-1574(Del.)) PROGRESS RELATING TO CIVILIAN APPLICATIONS DURING MARCH 1962. Russell W. Dayton and Ronald F. Dickerson (Battelle Memorial Inst., Columbus, Ohio). Apr. 1, 1962. Contract W-7405-Eng-92. 87p.

162. A DISCUSSION OF NEUTRON RADIOGRAPHY. Harold Berger (Argonne National Lab., Ill.). Nondestructive Testing, 20: 185-92; 194(May-June 1962). (ANL-46F-294)

163. (TID-15034) RADIOISOTOPE PRODUCT DATING. ISOTOPIC METHOD OF AGE DETERMINATION OF INDUSTRIAL PRODUCTS. T. C. Gregson and W. R. Miller (Goodyear Tire and Rubber Co., Akron, Ohio). Aug. 1, 1961. Contract AT(11-1)-719. 122p.

164. (CEA-tr-A-1052) UTILISATION DE GAS RADIOACTIFS POUR LE REPERAGE PRECIS DES DEFAUTS DANS LES GAINES DE CABLES DE TELECOMMUNICATIONS. (Use of Radioactive Gas for the Precise Marking of Defects in Telecommunication Cable Sheaths). G. Tidau. Translated into French from Atompraxis, 5: 26-7(1959). 5p.

165. SOME APPLICATIONS OF RADIOISOTOPES IN INSTRUMENT ENGINEERING. J. R. Rhodes (United Kingdom Atomic Energy Authority, Wantage, Eng.). Instr. Pract., 16: 559-67(May 1962).

166. INDUSTRIAL RADIOGRAPHY. F. L. Bett (Australian Atomic Energy Commission Research Establishment, Lucas Heights, New South Wales). Atomic Energy, 5: No. 2, 2-9(Apr. 1962).

167. SMALL RADIOISOTOPE DISPLACEMENT TRANSDUCERS. L. F. Atkinson and R. F. Knudsen (Vauxhall Motors Ltd., Luton, Beds., Eng.). Intern. J. Appl. Radiation and Isotopes, 13: 100-1(Feb. 1962). (In English)

168. UTILIZATION OF RADIOACTIVE ISOTOPES FOR INVESTIGATION OF MECHANICAL ENGINEERING PROBLEMS. K. Kollmann and D. Stegemann (Technische Hochschule, Karlsruhe, Ger.). Kerntechnik, 4: 41-4(Feb. 1962). (In German)

169. RADIOISOTOPE METHODS FOR MEASURING WEIGHT OF CONTENTS OF ASSEMBLED ITEMS. Sigmund Berk (U. S. Army Ordnance Arsenal, Frankford, Philadelphia). Nondestructive Testing, 20: 177-9; 194(May-June 1962).

170. (SCL-T-422) INVESTIGATION OF SURFACE PROCESSES WITH RADIOACTIVITY. H. Frauenfelder. Translated by Marcel I. Weinreich (Sandia Corp., Albuquerque, N. Mex.) from Helv. Phys. Acta, 23: 347-80(1950). 42p.

171. (NS-7) SEWAGE TRACING WITH RADIOACTIVE ISOTOPES, DETECTION EQUIPMENT FOR IN SITU MEASUREMENTS OF P^{32}. K. M. Gibbons (New Zealand. Dept. of Scientific and Industrial Research. Div. of Nuclear Sciences, Lower Hutt). June 4, 1959. 15p.

172. (NP-11767) PROGRAM AND ABSTRACTS FOR THE FOURTH JAPAN CONFERENCE ON RADIOISOTOPES, OCTOBER 1961. (Japan Atomic Industrial Forum, Inc., Tokyo and Japan Radioisotope, Inc., Tokyo). 391p.

173. PRACTICAL APPLICATIONS OF γ-RAY LEVEL GAGES. Tetsuo Sumi. Hitachi Hyoron, 42: 1333-8(Dec. 1960).

174. THE USE OF AGFA-TEXO-F-FILM IN THE NON-DESTRUCTIVE TESTING OF MATERIALS WITH γ-RAYS. E. Schiebold, E. Becker, and F. Vorsprach. Isotopentechnik, 1: 2-9(Aug. 1960).

175. A RADIOISOTOPE LABORATORY FOR BUILDING MATERIALS RESEARCH. Harry Cermak. Silikat Tech., 11: 577-9(Dec. 1960).

176. (AERE-Bib-140) MEASUREMENT OF SOIL MOISTURE AND DENSITY BY NUCLEAR METHODS. A Bibliography. R. Sweeney (United Kingdom Atomic Energy Authority. Research Group. Wantage Research Lab., Wantage, Berks, England). May 1962. 15p.

177. RADIOACTIVE ISOTOPES IN COASTAL ENGINEERING. O. Callesen. Ingenioeren (Internat. edit.), 5: 81-4(Sept. 1961).

178. MARINE BED-LOAD AND DISPLACEMENT STUDIES MADE BY FRENCH ENGINEERS. J. Larras. p.51-7 of "International Congress of Navigation. 20th, Baltimore, 1961. Ocean Navigation. Sect. II." Brussels, Secretariat General A.I.P.C.N., 1961.

179. RADIOACTIVE TRACER STUDIES OFF BOMBAY HARBOR. M. G. Hiranadani and C. V. Gole. p.81-100 of "International Congress of Navigation. 20th, Baltimore, 1961. Ocean Navigation. Sect. II." Brussels, Secretariat General A.I.P.C.N., 1961.

180. RECENT RESEARCH ON SAND DRIFT IN JAPAN. M. Nakamichi and N. Shiraishi. p.101-24 of "International Congress of Navigation. 20th, Baltimore, 1961. Ocean Navigation. Sect. II." Brussels, Secretariat General A.I.P.C.N., 1961.

181. INVESTIGATION FOR THE EUROPOORT PROJECT. H. A. Ferguson, p.125-40 of "International Congress of Navigation. 20th, Baltimore, 1961. Ocean Navigation. Sect. II." Brussels, Secretariat General A.I.P.C.N., 1961.

182. SAND AND SILT MOVEMENT RESEARCH IN PORTUGAL. F. M. Abecasis. p.149-73 of "International Congress of Navigation. 20th, Baltimore, 1961. Ocean Navigation. Sect. II." Brussels, Secretariat General A.I.P.C.N., 1961.

183. THE MEASUREMENT OF THE HUMIDITY OF BUILDING MATERIALS WITH γ-RADIATION ISOTOPES. Werner Stolz. Bauplanung u. Bautech., 16: 500 (Oct. 1961).

184. RADIOISOTOPES AND THEIR APPLICATIONS; THE INDUSTRIAL USE OF RADIOELEMENTS. J. Perette. Bull. Inform. A.T.E.N., No. 28, 10-15 (Mar.-Apr. 1961).

185. THE EXAMINATION OF WELDED JOINTS OF STEEL PLATES LESS THAN FIFTY MILLIMETERS THICK. Ingenieria Quimica, 6: 23-6(Jan. 1961).

186. THE APPLICATION OF RADIOISOTOPES FOR ON-SITE INSPECTION OF THE STATE OF FRENCH GASMAINS. Pierre Ruault. Microtecnic, 16: 259-64(Dec. 1961).

187. THE DETECTION OF CABLE DEFECTS BY MEANS OF RADIOISOTOPES. G. Lemm and W. Reusse. NTZ-Nachrtech. Z., 14: 225-6(May 1961).

188. UP-TO-DATE METHODS OF DEFECTOSCOPY. V. S. Sokolov. Priborostroenie, No. 9, 16-20(Sept. 1961).

189. STUDY ON WEAR IN THE SHEARING PROCESS BY MEANS OF IRRADIATED TOOLS. Toshio Sata, Kunio Abe, and Kiyoshi Nakajima. Sci. Papers Inst. Phys. Chem. Research (Tokyo), 54: 307-12(Sept. 1960).

190. THE APPLICATION OF RADIOISOTOPES. Jean Loeb. Tech. petrole, 16: 8555-7(Dec. 1961).

191. RADIOACTIVE TRACERS IN CHEMISTRY AND INDUSTRY. Pascaline Daudel. Translated from the French by Ulli Eisner. London, Charles Griffin, 1960. 210p.

192. RADIOISOTOPES. Olga Jovanovic-Kovacevic. Belgrade, Export Press, 1960. 45p.

193. WHAT ISOTOPES OFFER US. A Milojevic, V. Urosevic, and M. Kurepa. Belgrade, Export Press, 1960. 64p.

194. THE RADIOSULFUR ISOTOPE S^{35}. V. A. Sokolov, E. A. Tikhomirova, and N. A. Kosolapova. Moscow, Atomizdat, 1960. 25p.

195. (TID-16013) RADIOISOTOPES RESEARCH, DEVELOPMENT, AND RELATED ACTIVITIES. Quarterly Progress Report No. 13, December 15, 1961 - March 15, 1962. (Chicago. Univ. Labs. for Applied Science). Contract AT(11-1)-712. 18p. (LAS-SR-161-43)

196. UTILIZATION OF ISOTOPES FOR CONTROL APPARATUS WITH THE OBJECT OF AUTOMATION. S. Margolinas. Automazione e strumentazione, 9: 81-6 (1961). (In Italian).

197. THE USE OF IONIZING RADIATION FOR THE VULCANIZATION OF SILICONE RUBBER. A. S. Kuzminski. Rev. Gen. du Caoutchouc, 38: 1811-14(Dec. 1961).

198. DUST MEASUREMENTS USING MEMBRANE FILTERS CONTAINING RADIOACTIVE NICKEL. G. Kubie and K. Spurny. Pracovni lekarstvi, 13: 274-7(Aug. 1961). (In Czech.)

199. THICKNESS MEASUREMENT WITH COMBINED β RADIATION SOURCES. G. Schuetz (Mitteilung aus dem VEB Vakutronik, Dresden). Isotopentechnik, 2: 129-31(May 1962). (In German)

200. MULTIPLE THICKNESS TIMES DENSITY GAMMA GAGE. N. H. Cherry (to U. S. Atomic Energy Commission). U. S. Patent 3,046,402. July 24, 1962.

201. NONDESTRUCTIVE QUALITY CONTROL: SOME SPECIAL METHODS OF IRRADIATION TESTING. T. Van der Klis. Bedrijf en Tech., 16: 507-9(June 10, 1961).

202. APPLICATION OF RADIOACTIVITY TO SUBTERRANEAN HYDRAULIC ENGINEERING. R. Hours (Centre d'Etudes Nucleaires, Saclay, France). Houille blanche, 599-611(June 1960). (CEA-2096). (In French)

203. CONTINUOUS WALL THICKNESS MEASUREMENT ON THIN-WALLED TUBES WITH THE HELP OF BETA RADIATION. Hans Kraechter and Hans-Erich Schloemer. Nukleonik, 4: 180-4(June 1962). (In German)

204. DETERMINATION OF DUSTINESS BY THE METHOD OF MEMBRANE FILTERS LABELED WITH RADIOACTIVE NICKEL. G. Kubie and K. Spurny. Pracovni lekarstvi, 13: 274-7(Aug. 1961).

205. SNOW MEASUREMENTS WITH RADIOISOTOPES. Wiss. u Fortschr., 11: 473(Dec. 1961).

206. IMPROVEMENTS IN OR RELATING TO MEASURING APPARATUS. David Arthur Walker (to Rolls-Royce Ltd.). British Patent 903,180. Aug. 15, 1962.

207. (AERE-READING LIST-10) THE USES OF RADIOISOTOPES. R. Sweeney, comp. (United Kingdom Atomic Energy Authority. Research Group. Wantage Research Lab., Wantage, Berks, England). June 1962. 2p.

208. PRIMENENIE RADIOAKTIVNYKH IZOTOPOV V GIDROTEKHNICHESKOM STROITEL' STVE. (Applications of Radioisotopes in Hydrotechnology). M. P. Belikov, V. A. Emil'yanov, and V. E. Nesterov. Moscow, State Publishing House of Literature on Construction, Architecture, and Construction Materials, 1961. 164p.

209. USE OF TRITIUM TO TRACE UNDERGROUND WATER. C. M. Lapointe (Dept. of Mines and Technical Surveys, Ottawa). Preprint. [Ottawa], Canadian Nuclear Association, 1962. 25p.

210. (TID-6613(Suppl.3)) RADIOISOTOPES IN WORLD INDUSTRY. Abstracts of Selected Foreign Literature. (Division of Isotopes Development, AEC). Oct. 1962. 134p.

211. (OTS-60-51035) THE DETERMINATION OF THE BULK DENSITY OF PRESSED WOOD BY METHOD OF TRACER ATOMS. P. N. Zhitkov. Translated from Derevoobrabatyvayushchaya Prom., 7: No. 3, 16-17(1959). 4p. (PST-Cat-320)

212. RADIONUCLIDES AND IONIZING RADIATIONS FOR DETERMINATION OF PARTICLE SIZE DISTRIBUTION. Harald Ramdohr. Kerntechnik, 4: 318-20(Aug. 1962). (In German)

213. EXPERIENCES IN THE USE OF GAMMA-EMISSION OF RADIOACTIVE Co^{60} AND Cs^{137} ISOTOPES TO CONTROL WELD JOINTS AND CASTINGS AT THE NORIL'SK COMBINE OF MINING AND METALLURGY IMENI A. P. ZAVENYAGIN. Yu. N. Kalenikhin. Radioaktivn. Izotopy i Yadernye Izlucheniya v Nar. Khoz. SSSR, Tr. Vses. Soveshch., No. 3, 52-6(1961).

214. SELECTION OF ECONOMICALLY EFFECTIVE GAMMA EMITTERS FOR FLAW DETECTION. V. I. Postnikov. Radioaktivn. Izotopy i Yadernye Izlucheniya v Nar. Khoz. SSSR, Tr. Vses. Soveshch., No. 3, 57-61(1961).

215. COBALT-60 RADIATION IN RESEARCH AND PRODUCTION PROCESSING. A. J. Felice (Atomic Energy of Canada Ltd., Ottawa). Preprint. [Ottawa], Canadian Nuclear Association, 1962. 8p.

216. PRIMENENIE RADIOAKTIVNYKH IZOTOPOV DLYA IZUCHENIYA DOLGOVECHNOSTI DETALEI MASHIN. (Application of Radioisotopes in Engine Wear Studies). A. I. Nisnevich. Moscow, Gosatomizdat, 1962. 184p.

217. (MND-P-2640) INSTRUCTION MANUAL--SNAP-7C ELECTRIC GENERATION SYSTEM. [E. Blazek] (Martin Co. Nuclear Div., Baltimore). Oct. 1, 1961. Contract AT(30-3)-217. 60p.

218. (MND-P-2707) STRONTIUM-90 FUELED THERMOELECTRIC GENERATOR POWER SOURCE--FIVE-WATT U. S. NAVY WEATHER STATION. Final Report. (Martin-Marietta Corp. Aerospace Div., Baltimore). [nd]. Contract AT(30-3)-217. 127p.

219. CONTINUOUS CONTROL AND REGULATION OF THE MOISTURE CONTENT OF BULK MATERIAL BY THE NEUTRON SCATTERING METHOD. Herbert Neuhaus, Friedrich Hombech, and Wilhelm Kuehn (Klockner-Werke A. G. Hutte Haspe, Ger.). Stahl Eisen, 82: 1017-26(July 19, 1962).

220. EINFUHRUNG IN DIE MESSTECHNIK DER KERNSTRAHLUNG UND DIE ANWENDUNG DER RADIOISOTOPE. (Introduction to Measurement Techniques in Nuclear Radiation and the Application of Radioisotopes). Heinrich Fassbender. Stuttgart, Georg Thieme Verlag, 1962. 435p. DM 49.50.

221. RADIOISOTOPE-ACTIVATED FUEL-CELL ELECTRODES. Maurice Lang (Yardney Electric Corp., New York). IRE (Inst. Radio Engrs.). Trans. Military Electron., MIL-6: 58-62(Jan. 1962).

222. THE CESIUM-137 THERMOELECTRIC GENERATOR. H. O. Banks, Jr. and W. W. T. Crane (Royal Research Corp., Hayward, Calif.). IRE (Inst. Radio Engrs.), Trans. Military Electron. MIL-6: 98-102(Jan. 1962).

223. (TID-16998) INVESTIGATION OF THE EFFECTS OF IONIZING RADIATION ON THE SEDIMENTATION OF SEWAGE. Quarterly Report, March 1-June 1, 1962. (Unidynamics. Div. of Universal Match Corp., St. Louis). Contract AT(11-1)-905. 63p. (UMC-D62-218)

224. MODERN RADIOISOTOPE TECHNIQUES. Duane N. Sunderman and Robert A. Ewing. Battelle Tech. Rev., 11: No. 1, 3-8(Jan. 1962).

225. THE UTILIZATION OF RADIOACTIVE ISOTOPES IN HYDROLOGY. V. MEASUREMENT OF THE WATER FLOW OF OPEN CURRENTS BY MEANS OF RADIOACTIVE TRACERS. H. Moser, F. Neumaier, and W. Rauert(Forschungsstelle fur Radiohydrometrie, Munich). Atomkernenergie, 7: 321-4(Sept. 1962). (In German)

226. APPLICATIONS OF A SUBSURFACE SOLID-STATE ISOTOPE INJECTOR TO NUCLEAR-TRACER SURVEY METHODS. J. M. Edwards and E. L. Holter (McCullough Tool Co., Los Angeles, Calif. and Casper, Wyo.). J. Petrol. Technol., 14: 121-4(Feb. 1962).

227. Sr^{90} POWERS AN AUTOMATIC WEATHER STATION. Wilfred L. Kershaw (Martin Co., Baltimore). Nucleonics, 20: No. 11, 92; 94; 96-7(Nov. 1962).

228. RADIOACTIVITY IN OCEANOGRAPHY. F. F. Koczy and J. N. Rosholt. p.18-46 of "Nuclear Radiation in Geophysics." New York, Academic Press Inc., Publishers, 1962. (In English)

229. RADIOACTIVITY IN HYDROLOGY. Erik Eriksson. p.47-60 of "Nuclear Radiation in Geophysics." New York, Academic Press Inc., Publishers, 1962. (In English)

230. (NP-11563) INDUSTRIAL RADIOISOTOPE TRACER CALCULATIONS. A GUIDE IN PROBLEM SOLVING WITH TYPICAL NUMERICAL EXAMPLES. Robert E. Black (General Motors Corp. Research Labs. [Div.], Detroit). 90p.

231. (TID-17024) RADIOISOTOPES RESEARCH DEVELOPMENT, AND RELATED ACTIVITIES. Quarterly Progress Report, June 15 to September 15, 1962 (Fifteenth Quarter). (Chicago. Univ. Labs. for Applied Sciences). Oct. 1962. Contract AT(11-1)-712. 33p. (LAS-SR-161-51)

232. TRANSACTIONS OF THE AMERICAN NUCLEAR SOCIETY, 1962 WINTER MEETING, WASHINGTON, D. C., NOVEMBER 26-28, 1962. Malcolm D. Ferrier, ed. Trans. Am. Nucl. Soc., 5: No. 2 273-491(Nov. 1962).

233. SOFT GAMMA RADIOGRAPHY WITH MINIMUM HAZARD RADIOISOTOPE. James C. McCue (Edgerton, Germeshausen and Grier, Inc., Boston). Nondestructive Testing, 20: 383-6(Nov.-Dec. 1962).

234. RADIOCARBON DATING OF DEEP WATER OF THE PACIFIC AND INDIAN OCEANS. G. S. Bien, N. W. Rakestraw, and H. E. Suess (California. Univ., LaJolla). IAEA Preprint No. SM-33/13. 12p. (TID-17362)

235. INDUSTRIAL APPLICATION OF LARGE RADIATION SOURCES. Josef Domanus. Przemysl Chem., 41: 114-17(Mar. 1962). (In Polish)

236. PIPE-LINE EXPLORATION. Serge A. Scherbatskoy. U. S. Patent 3,060,315. Oct. 23, 1962.

237. THE POSSIBILITIES FOR GAS DENSITY GAUGING BY SINGLE SCATTERING OF ELECTRONS. H. R. Falckenberg and B. W. Schumacher (Ontario Research Foundation, Toronto). Can. J. Phys., 40: 1521-7(Nov. 1962).

238. CAVITATION AND EROSION DAMAGE AND DAMAGE PARTICLE-SIZE MEASUREMENTS WITH RADIOISOTOPES. William J. Walsh and Frederick G. Hammitt (Univ. of Michigan, Ann Arbor). Nucl. Sci. Eng., 14: 217-23(Nov. 1962).

239. INDUSTRIAL USES OF ISOTOPES. S. F. Libby (Univ. of California, Los Angeles). Ann. Rev. Nuclear Sci., 11: 461-82(1961).

240. RADIOGRAPHIC MACROSTRUCTURAL TESTING OF REINFORCED CONCRETE STRUCTURES. A. Hoenig (Brno Technical Inst.). Kerntechnik, 4: 499-503 (Nov. 1962). (In German)

241. (NYO-9720) DEVELOPMENT OF KRYPTON 85 AS A UNIVERSAL TRACER. PHASE I AND II. PREPARATION AND PROPERTIES OF KRYPTONATES. Annual Report. David Chleck, Richard Maehl, Orlando Cucchiara, Rajni Patel, and Edmund H. Carnevale (Parametrics, Inc., Waltham, Mass.). Mar. 26, 1962. Contract AT(30-1)-2757. 135p.

242. GAS FLOW MEASUREMENTS BY THE TOTAL-COUNT METHOD. B. A. Fries (California Research Corp., Richmond). Intern. J. Appl. Radiation Isotopes, 13: 277-80(June 1962). (In English)

243. RADIOAKTIVNYE IZOTOPY I YADERNYE IZLUCHENIYA V NARODNOM KHOZYAISTVE SSSR. (Radioisotopes and Nuclear Radiation in the National Economy of USSR). Proceedings of the All-Union Conference, Riga, April 12-16, 1960. Volume 1. N. A. Petrova, L. I. Petrenko, and P. S. Savitskii, eds. Moscow, Gostoptekhizdat, 1961. 340p.

244. SHORT-LIVED RADIOISOTOPE PRODUCTION, PROCESSING, DISTRIBUTION AND APPLICATIONS IN KOREA. Chong Kuk Kim (Atomic Energy Research Inst., Seoul, Korea). IAEA Preprint SM-32/8. 6p. (In English)

245. SHORT-LIVED ISOTOPES USED AS TRACERS IN INDUSTRY (WITH SPECIAL REFERENCE TO SWEDISH INDUSTRY). L. G. Erwall, H. G. Forsberg, and K. Ljunggren (Technical Isotopes Lab., Stockholm). IAEA Preprint SM-32/13. 22p. (In English)

246. STUDIES OF POWDER MIXING WITH SHORT-LIVED RADIOISOTOPES. I. Bjerle (Stockholm Siporex Mfg. Co.) and H. G. Forsberg. IAEA Preprint SM-32/15. 15p. (In English)

247. SOME RECENT APPLICATIONS OF SHORT HALF-LIFE RADIOISOTOPES IN AUSTRALIA. J. S. Watt (Australian Atomic Energy Commission, Sutherland). IAEA Preprint SM-32/19. 20p. (In English)

248. APPLICATION OF SHORT-LIVED TRACERS TO FLOW-RATE MEASUREMENTS AND LEAK DETECTION. J. Guizerix and R. Cornuet (Centre d'Etudes Nucleaires, Grenoble, France). IAEA Preprint SM-32/21. 13p. (In French)

249. RADIOACTIVE TRACERS IN THE STUDY OF SUBTERRANEAN WATER FLOW. M. Birnbaum, E. Gaspar, L. Grigorescu, M. Oncescu, and P. Sandru (Inst. of Atomic Physics, Bucharest). IAEA Preprint SM-32/22. 15p. (In French)

250. MEASUREMENT OF THE SPECIFIC GRAVITY OF THE WATER-STEAM EMULSION FLOWING IN A SCREEN TUBE OF AN INDUSTRIAL BOILER USING SODIUM-24. C. Maille (Societe Stein and Roubaix, Paris), J. Moinard, D. Blanc, and J. Fontan. IAEA Preprint SM-32/24. 18p. (In French)

251. ALPHA GAUGE FOR THE MEASUREMENT OF SMALL DENSITY THICKNESSES. R. P. Gardner and H. H. Ross (Oak Ridge Inst. of Nuclear Studies, Tenn.). Rev. Sci. Instr., 33: 1227-30(Nov. 1962).

252. THE INVESTIGATION OF SAND MOVEMENT USING RADIOACTIVE GLASS SAND IN KASHIMA HARBOR. Shoji Sato and Norio Tanaka (Harbor Technics Research Inst., Ministory of Japan). Radioisotopes (Tokyo), 11: 355-62(Nov. 1962). (In Japanese)

253. WELL LOGGING RADIATION SOURCES. Robert E. Fearon and Jean M. Thayer (to Well Surveys, Inc.). U. S. Patent 3,071,690. Jan. 1, 1963. Filed July 30, 1949.

254. A RADIOTRACER TEST FACILITY FOR HIDEOUT MEASUREMENTS UNDER BOILER CONDITIONS. P. Cohen, G. Russell Taylor, and L. F. Picone (Westinghouse Electric Corp., Pittsburgh). Preprint Paper No. 62-WA-253. New York, The American Society of Mechanical Engineers, 1962. 7p. $1.00.

255. (ANL-FGF-386) NEUTRON RADIOGRAPHY AS AN INSPECTION TECHNIQUE. Harold Berger (Argonne National Lab., Ill.). Sept. 1962. Contract [W-31-109-eng-38]. 23p. (UAC-6936)

256. DYNAMIC RADIOLOGICAL TESTING METHODS. K. F. Sinclair and H. A. Zagorites (U. S. Naval Radiological Defense Lab., San Francisco, Calif.). ARS (Am. Rocket Soc.) J., 32: 1892-8(Dec. 1962).

257. GROUND WATER QUANTITY MEASUREMENT ON THE FOOT OF MT. FUJI BY THE USE OF RADIOISOTOPES. Toshiro Ochiai and V. C. Rodriguez (Agriculture and Forestry). Radioisotopes (Tokyo), 11: 373-9(Nov. 1962). (In English)

258. GROUND WATER INVESTIGATION USED ^{131}I AND FALLOUT CESIUM AS TRACER. Tsunenobu Terasaki, Yoshiyuji Yamanobe, Hachiro Niizeki, and Tomoyoshi Kamikawa (Yamagata Univ., [Japan]). Radioisotopes (Tokyo), 11: 380-8 (Nov. 1962). (In Japanese)

259. (AERE-R-3704) MEASUREMENT OF LEAKS IN HERMETICALLY SEALED CONTAINERS USING ^{85}Kr. P. F. Berry and J. F. Cameron (United Kingdom Atomic Energy Authority. Research Group. Wantage Research Lab., Wantage, Berks, England). Nov. 1962. 33p.

260. (BMI-1606) STUDIES OF ON-STREAM PRODUCTION OF SHORT-LIVED INTRINSIC RADIOTRACERS FOR INDUSTRIAL PROCESS CONTROL. Peter Gluck, James L. McFarling, John F. Kircher, Charles W. Townley, and Duane N. Sunderman (Battelle Memorial Inst., Columbus, Ohio). Dec. 18, 1962. Contract W-7405-eng-92. 56p.

261. (TID-7640) ISOTOPE TECHNOLOGY DEVELOPMENT PROGRAM FOURTH ANNUAL CONTRACTORS MEETING CONDUCTED AT OAK RIDGE NATIONAL LABORATORY, OAK RIDGE, TENNESSEE, DECEMBER 3-4, 1962. (Oak Ridge National Lab., Tenn.). Contract [W-7405-eng-26]. 88p.

262. PRACTICAL APPLICATIONS OF HIGH-SENSITIVE GAMMA-RELAYS. M. Yu. Borukhov and B. K. Mal'tsev. Tr. Tashkentsk. Konf. po Mirnomu Ispol'z. At. Energii, Akad. Nauk Uz. SSR, 2: 32-6(1960).

263. USE OF GAMMA RAYS IN MEASURING WATER CONTENT AND PERMEABILITY IN UNSATURATED COLUMNS OF SOIL. C. G. Gurr (C.S.I.R.O., Adelaide). Soil Sci., 94: 224-9(Oct. 1962).

264. CRITICISM OF RADIOACTIVE TOOL LIFE TESTING. N. H. Cook (Massachusetts Inst. of Tech., Cambridge) and A. B. Lang. Preprint Paper No. 62-WA-127. New York, The American Society of Mechanical Engineers, 1962. 5p. $1.00.

265. APPLICATION OF ISOTOPE TECHNIQUES IN HYDROLOGY. Technical Reports Series No. 11. A Comprehensive Report from a Panel held in Vienna, November 6-9, 1961. (International Atomic Energy Agency, Vienna). 1962. 34p. STI/DOC/10/11. $1.00(IAEA).

266. PROCESS AND APPARATUS FOR THE IRRADIATION OF WEBS, RIBBONS, OR FILAMENTS. (to Herberlein and Co., A. G.). British Patent 912,229. Dec. 5, 1962. Priority date Apr. 14, 1960, Switzerland.

267. MEASURING SYSTEM. John R. Dukes and Luther Eggman (to Industrial Nucleonics Corp.). U. S. Patent 3,050,626. Aug. 21, 1962.

268. RADIOACTIVE SNOW GAGE. Kazuhiko Itagaki and Shoichi Koinuma (Sapporo Meteorological Observatory). Radioisotopes (Tokyo), 11: 350-4 (Nov. 1962). (In Japanese)

269. NUCLEAR MEASURING SYSTEM. Serge A. Scherbatskoy. U. S. Patent 3,075,115. Jan. 22, 1963.

270. GAUGE. Guenter Reich (to E. Leybold's Nachfolger). U. S. Patent 3,071,704. Jan. 1, 1963. Priority date June 3, 1960, Germany.

271. PRACTICAL APPLICATIONS OF SHORT-LIVED RADIOISOTOPES. Intern. At. Energy Agency Bull., 5: 24-6(Jan. 1963).

272. THE MEASUREMENT OF WATER FLOW WITH RADIOISOTOPES. [PART] 1. Franz Walter Baehr. Wasserwirtschaft, 52: 173-7(July 1962). (In German)

273. THE MEASUREMENT OF WATER FLOW WITH RADIOISOTOPES. [PART] 2. Franz Walter Baehr. Wasserwirtschaft, 52: 222-6(Aug. 1962). (In German)

274. EFFEKTIVNOST PRIMENENIYA RADIOAKLIVNYKH IZOTOPOV V NARODNOM KHOZYAISTVE. (Efficiency of Radioisotope Applications in National Economy). G. F. Mikheev and V. I. Postnikov. Moscow, Gosatomizdat, 1962. 104p.

275. (ANL-FGF-339) A FILM COPYING TECHNIQUE FOR IMPROVING RADIOGRAPHIC CONTRAST. N. S. Beyer, Harold Berger, N. P. Lapinski, and I. R. Kraska (Argonne National Lab., Ill.). Apr. 1962. Contract [S-31-109-eng-38]. 10p. (UAC-6372)

276. THE SENSITIVITY AND ACCURACY OF THICKNESS MEASUREMENTS USING THE PENETRATION METHOD WITH RADIONUCLIDES. Heinrich Mueller (Frieseke and Hoepfner G.m.b.H., Erlangen-Bruck, Ger.). p.733-45 of "Instruments and Measurements." New York, Academic Press Publishers, 1961. (In German)

277. A BETA PARTICLE THREAD THICKNESS GAUGE. R. K. Barnes and J. H. Barrett (Department of Scientific and Industrial Research, Eng.). p.746-56 of "Instruments and Measurements." New York, Academic Press Publishers, 1961. (In English)

278. (AEC-tr-4618) THE USE OF RADIOISOTOPES IN PRACTICAL GEOLOGY. Immo Wendt. Translated from Kerntechnik, 2: 1-9(1960). 22p.

279. (TID-12711) POSSIBLE REQUIREMENTS FOR RADIOISOTOPES AS POWER SOURCES. William H. McVey (Office of Operations Analysis and Forecasting, AEC). Apr. 1961. 15p.

280. (AEC-tr-4475) TRANSACTIONS OF THE ALL-UNION SCIENTIFIC TECHNICAL CONFERENCE ON THE USE OF RADIOACTIVE AND STABLE ISOTOPES AND RADIATIONS IN THE NATIONAL ECONOMY AND IN SCIENCE, APRIL 4-12, 1957. PROSPECTING AND DEVELOPMENT OF USEFUL MINERALS. Translation of Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil'. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957. Rozvedka i Razrabotka Poleznykh Iskopaemykh. 1958. 286p.

281. (AEC-tr-4475(p.220-4)) STUDY OF THE DYNAMICS OF UNDERGROUND WATERS BY MEANS OF RADIOACTIVE ISOTOPES. Ya. B. Finkel'shtein, V. A. Filonov, V. N. Soifer, and M. P. Obukhova. Translated from Trudy Vsesoyuz. Nauch.-Tekh. Konf. Primenen. Radioaktiv. i Stabil'. Izotopov i Izluchenii v Narod. Khoz. i Nauke, Moscow, 1957. Rozvedka i Razrabotka Poleznykh Iskopaemykh., 191-4(1958).

282. RADIOISOTOPES FOR INDUSTRIAL CONTROL MEASUREMENTS. Wolfgang Schafer. A E G Mitt., 50: 318-20(Aug.-Sept. 1960). (In German)

283. DENSITY MEASUREMENT WITH ISOTOPES. Bernhard Mengelkamp. A E G Mitt., 50: 321-6(Aug.-Sept. 1960). (In German)

284. ON THE CHOICE OF THE RADIOISOTOPE IN TESTING MATERIALS BY MEANS OF GAMMA-RAY BACK-SCATTERING. A. S. Rudnitskii. Atomnaya Energ., 10: 400-2(Apr. 1961). (In Russian)

285. RELAY SYSTEMS USING RADIOACTIVE SOURCES. J. Guizerix. Bull. inform. sci. et tech. (Paris), No. 51, 58-62(May 1961). (In French)

286. INVESTIGATION ON THE SILVER-ZINC STORAGE BATTERY WITH RADIOACTIVE Ag^{110} ISOTOPE. Tivadar Z. Palagyi (Central Research Inst. for Chemistry, Academy of Sciences, Budapest). J. Electrochem. Soc., 108: 904-6(Sept. 1961).

287. NONDESTRUCTIVE TESTING OF PRESSURE VESSELS. John Battema. Can. Welder, 52: 10-16(Feb. 1961).

288. (TID-6613(Suppl. 1)) RADIOISOTOPES IN WORLD INDUSTRY. ABSTRACTS OF SELECTED FOREIGN LITERATURE. (Office of Isotopes Development, AEC). June 1961. 123p.

289. RECENT APPLICATIONS OF RADIOACTIVE TRACERS. G. Courtois. Bull. inform. sci. et tech. (Paris), No. 51, 71-5(May 1961). (In French)

290. USE OF RADIOELEMENTS IN HYDROLOGY, IN THE LOCALIZATION OF LEAKS, AND IN THE MEASUREMENT OF FLOW. R. Hours. Bull. inform. sci. et tech. (Paris), No. 51, 63-70(May 1961). (In French

291. ACTIVITIES OF THE SECTION FOR APPLICATIONS OF RADIOELEMENTS. R. Cornuet. Bull. inform. sci. et tech. (Paris), No. 51, 14-16(may 1961). (In French)

292. STATISTICS ON THE PRODUCTION AND UTILIZATION OF RADIOELEMENTS IN FRANCE. L. Cassin. Bull. inform. sci. et tech. (Paris), No. 51, 105-8(May 1961). (In French)

293. RADIOACTIVE ISOTOPES IN SELECTING COOLING FLUIDS FOR GRINDING OPERATIONS. S. N. Korchak. Stanki i Instr., No. 10, 26-8(1960).

294. INVESTIGATION OF THE WEAR RESISTANCE OF DRAWING DIES BY MEANS OF RADIOACTIVE ISOTOPES. P. F. Groshev. Tsvetnye Metal., No. 10, 71-6 (1960).

295. MEASUREMENT OF METAL TRANSFER IN ELECTRICAL CONTACTS BY THE RADIOACTIVE ISOTOPE METHOD. F. Llewellyn Jones, M. R. Hopkins, and C. R. Jones (Univ. of Wales, Cardiff). Brit. J. Appl. Phys., 12: 485-9 (Sept. 1961).

296. (NP-10712) PORADNIK DEFEKTOSKOPII IZOTOPOWEJ. (Handbook on Isotopic Defectoscopy). (Poland. Biuro Urzadzen Techniki Jadrowej, Warsaw), [1961?]. 62p.

297. INSPECTION OF THICK-WALLED OBJECTS BY γ-DEFECTOSCOPE WITH SCINTILLATION COUNTERS. V. N. Fainberg (Urals Chemical Machine Building Plant, USSR). Zavodskaya Lab., 411-13(1961). (In Russian)

298. INFLUENCE OF PHOTO-DEVELOPMENT ON THE CONTRAST AND DENSITY IN X AND γ DEFECTOSCOPY. V. S. Tokmakov (Bardin Central Scientific Research Inst. of Ferrous Metals, [USSR]). Zavodskaya Lab., 27: 479-80(1961). (In Russian)

299. THE AECL IRIDIUM-192 RADIOGRAPHY HANDBOOK. Technical Bulletin IR-1. (Atomic Energy of Canada Ltd. Commercial Products Div., Ottawa). July 1961. 44p. (AECL-1154)

300. THE OPTIMUM THICKNESS OF LEAD FOILS FOR MACROSTRUCTURE INVESTIGATIONS WITH RADIOACTIVE ISOTOPES. J. Hirling (Csepel Iron and Metal Works, Budapest). Isotopentechnik, 1: 159-60(May 1961). (In German)

301. MEMORANDUM ON NON-DESTRUCTIVE METHODS FOR THE EXAMINATION OF WELDS. Ref. No. T29/1. London, British Welding Research Association, 1958 (Revised Edition)-1960 (Second Edition). 82p. 8s 6d.

302. (AGN-3027-15) THE RADIOACTIVE, INDEPENDENT TRANSDUCER-RECEIVER (RIT-R) SYSTEM. Final Report, March 15, 1959 - August 12, 1960. (Aerojet-General Nucleonics, San Ramon, Calif.). Nov. 1960. Contract AT(04-3)-251. 166p.

303. (SRO-55) AN INVESTIGATION OF THE USE OF RADIOACTIVE ISOTOPES FOR DETERMINING THE SURFACE AREA OF POWDERED MATERIALS BY SORPTION METHODS. Final Report covering Period April 1, 1959 to March 31, 1961. Margaret C. Kordecki and Miriam B. Gandy (Georgia Inst. of Tech., Atlanta. Engineering Experiment Station). Contract AT(38-1)-202. 67p.

304. THE STATISTICAL ASSESSMENT OF RADIOACTIVE ISOTOPES AND THEIR EVALUATION. H. -J. Marcinowski (Isotopen-Studiengesellschaft e. V., Frankfurt am Main). Atomwirtschaft, 6: 293-5(May 1961). (In German)

305. RADIOISOTOPE APPLICATIONS ENGINEERING. Jerome Kohl, Rene D. Zentner, and Herbert R. Lukens. Van Nostrand Nuclear Science Series. Princeton, N. J., D. Van Nostrand Company, Inc., 1961. 574p. $16.50.

306. APPLICATION OF GAMMA RELAY IN DETERMINING ABSOLUTE VISCOSITY OF LIQUID. A. Popesku and I. Karabogdan. Rev. electrotech. energet., Acad. rep. populaire Roumaine, 5: 451-8(1960). (In Russian)

307. PRIMENENIE RADIOAKTIVNYKH IZOTOPOV V DEFEKTOSKOPII. RUKOVODSTVO PO RADIOAKTIVNYKH IZOTOPOV V PROMYSHLENNOI DEFEKTOSKOPII. (Applications of Radioactive Isotopes in Defectoscopy. A Manual of Radioisotopes in Industrial Defectoscopy). S. V. Rumyantsev. Moscow, Atomizdat, 1960. 294p.

308. (DPR/INF/260) ISOTOPE TECHNIQUES FOR NUCLEAR ENGINEERS. J. L. Putman (United Kingdom Atomic Energy Authority, London). Apr. 1961. 11p.

309. (NP-tr-649) A KRYPTON-85 LIGHT SOURCE. P. J. Nowacki, A Kazimerski, E. Strychalski, and J. Rydel. Translated by J. J. Cornish (J.K.A.E.A., Atomic Energy Research Establishment) from Polska Akad. Nauk Inst. Badan Jadrowych, No. 175/III, (Sept. 1960). 12p.

310. MEASUREMENTS OF AIR MOVEMENTS IN A HOUSE USING RADIOACTIVE TRACER GAS. A. H. Howland, D. E. Kimber, and R. F. Littlejohn (British Coal Utilisation Researcj Assn., Leatherhead, Eng.). J. Inst. Heating Ventilating Engrs. (London), 28: 57-71(May 1960).

311. (NP-tr-621) STUDY OF THE STRUCTURE OF METALS BY THE METHOD OF RADIOACTIVE ISOTOPES (SELECTED CHAPTERS). S. Z. Bokshteyn, S. T. Kishkin, and L. M. Moroz. Translated from p.95-193 of "Issledovaniye Stroyeniya Metallov Metodom Radioaktivnykh Izotopov" (A publication of the State Publishing House of Defense Industry, Moscow, 1959). 143p.

312. THE USE OF RADIOACTIVE ISOTOPES FOR THE STUDY OF LITTORAL DRIFT. J. J. Arlman (N. V. Phillips-Duphar Isotope Lab., Amsterdam), J. N. Svasek, and B. Verkerk. Philips Tech. Rev., 21: 157-66(1959-60). (In English)

313. (TID-13024) INVESTIGATION OF THE EFFECTS OF IONIZING RADIATION ON THE SEDIMENTATION OF SEWAGE. Second Quarterly Report. (Universal Match Corp., [Ferguson], Mo.). June 1, 1961. Contract AT(11-1)-905. 28p. (UMC-F61-130)

314. (BMI-1514(Del.)) PROGRESS RELATING TO CIVILIAN APPLICATIONS DURING APRIL, 1961. Russell W. Dayton and Clyde R. Tipton, Jr. (Battelle Memorial Inst., Columbus, Ohio). May 1, 1961. Contract W-7405-eng-92. 84p.

315. DENSITY MEASUREMENTS OF SOIL, CONCRETE, ORE AND SIMILAR MATERIALS WITH THE GAMMA-RAYS SCATTERING METHOD. Vekoslav Ramsak (Nuklearni Institut "Jozef Stefan," Ljubljana, Yugoslavia). Nova Proizvodnja, 11: 250-3(1960). (In Yugoslavian)

316. (BMI-X-171) RADIOISOTOPE AND RADIATION APPLICATIONS. Quarterly Progress Report. Duane N. Sunderman, ed. (Battelle Memorial Inst., Columbus, Ohio). Oct. 31, 1960. Contract W-7405-eng-92. 18p.

317. (BMI-X-172) RADIOISOTOPE AND RADIATION APPLICATIONS. Quarterly Progress Report. Duane N. Sunderman, ed. (Battelle Memorial Inst., Columbus, Ohio). Jan. 18, 1961. Contract W-7405-eng-92. 18p.

318. (BMI-X-173) RADIOISOTOPE AND RADIATION APPLICATIONS. Quarterly Progress Report. Duane N. Sunderman, ed. (Battelle Memorial Inst., Columbus, Ohio). May 2, 1961. Contract W-7405-eng-91. 38p.

319. RADIATION USES IN INDUSTRY AND SCIENCE. Lloyd E. Brownell (Michigan. Univ., Ann Arbor). 432p.

320. (NYO-2506) THE TECHNOLOGY AND APPLICATIONS OF LARGE FISSION PRODUCT BETA SOURCES. Quarterly Report, April 1 - June 30, 1961. (Radiation Applications Inc., Long Island City, N. Y.). July 13, 1961. Contract AT(30-1)-2186. 7p.

321. (AEC-tr-4482(p.1701-20)) MEASUREMENT OF UNDERGROUND WATER BY USE OF Na^{24}. [T.] Ochiahi, [S.] Kimura, and [T.] Takahashi.

322. (AEC-tr-4482(p.73-82)) DESIGN OF A BETA-RAY TRANSMISSION-TYPE THICKNESS GAUGE. I. Tajima and H. Ishizuka.

323. (AEC-tr-4482(p.83-9)) SUBTRACTION-TYPE THICKNESS GAUGE. H. Miwa, Y. Nishimura, and S. Umeda.

324. (AEC-tr-4482(p.90-5)) MEASUREMENTS OF THICKNESS BY USING GAMMA-RAYS. H. Fukatsu and S. Makino.

325. (AEC-tr-4482(p.96-113)) BREMSSTRAHLUNG AS A RADIATION SOURCE FOR THE THICKNESS GAUGE. T. Oshida, H. Miwa, and M. Shimizu.

326. (AEC-tr-4482(p.114-31)) NECESSARY AMOUNT OF Co^{60} FOR HORIZONTAL PENETRATION GAMMA-RAY LEVEL GAUGE. S. Suma and T. Sumi.

327. (AEC-tr-4482(p.142-9)) LEVEL GAUGE FOR POWDERY MATERIAL. Y. Nishimura and T. Ando.

328. (AEC-tr-4482(p.494-507)) TRIAL PRODUCTION OF CHARTS FOR TESTING RESOLVING POWER OF EMULSION FOR AUTORADIOGRAPHY. S. Oka, T. Mukaibo, S. Suzuki, and K. Yamada.

329. ALPHA PARTICLE THICKNESS GAUGE USING A SOLID STATE DETECTOR. Herbert L. Anderson (Univ. of Chicago). Nuclear Instr. & Methods, 12: 111-14 (June 1961). (In English)

330. (NYO-9040) THE POTENTIAL APPLICATIONS OF RADIOISOTOPE TECHNOLOGY TO WATER RESOURCE INVESTIGATIONS AND UTILIZATION. Final Report. Herbert W. Feely, Alan Walton, Charles R. Barnett, and Fernando Bazan (Isotopes, Inc., Westwood, N. J.). Apr. 3, 1961. Contract AT(30-1)-2477. 352p.

331. (AEC-tr-4482) PROCEEDINGS OF THE SECOND JAPAN CONFERENCE ON RADIO-ISOTOPES, FEBRUARY 1958. Translated from a publication of the Japan Atomic Industrial Forum, Inc., Tokyo, 1958. 1731p.

332. (AEC-tr-4482(p.150-60)) NONDESTRUCTIVE INSPECTION OF WELDED JOINT OF BOILER DRUM WITH RADIOISOTOPES. G. Ito.

333. (AEC-tr-4482(p.161-71)) GAMMA-RAY RADIOGRAPHY OF LIGHT ALLOYS USING Tm^{170}. M. Kato, M. Kobayashi, and W. Seki.

334. (AEC-tr-4482(p.206-19)) MEASUREMENT OF FLOW IN PENSTOCK USING RADIOISOTOPES. I. Otsuka, T. Goto, S. Kuwahara, I. Tako, and C. Onishi.

335. (AEC-tr-4482(p.220-35)) STUDY OF THE MECHANISM OF METAL WEAR BY USE OF RADIOISOTOPES. T. Sata.

336. (AEC-tr-4482(p.236-51)) RESEARCH ON ENGINE WEAR BY USE OF RADIOACTIVE TRACERS: PISTON RINGS ACTIVATED BY DEUTERON BOMBARDMENT. M. Kato, S. Tsutano, Y. Takai, and A. Umehara.

337. THE FIRST POLISH ATOMIC LAMP. Tudomany es Tech., No. 23, 716 (1960).

338. (MND-P-2350) SNAP I RADIOISOTOPE-FUELED TURBOELECTRIC POWER CONVERSION SYSTEM SUMMARY, JANUARY 1957 TO JUNE 1959. Paul J. Dick (Martin Co. Nuclear Div., Baltimore). June 1960. Contract AT(30-3)-217. 60p.

339. ENERGY-RICH RADIATION SOURCES FOR NON-DESTRUCTIVE MATERIALS TESTING. F. Malsch and R. Schittenhelm (Siemens-Reiniger-Werke A. G., Erlangen, Ger.). Atompraxis, 6: 470-6(Dec. 1960). (In German)

340. NONDESTRUCTIVE TESTING. Warren J. McGonnagle. New York, McGraw-Hill Book Company, Inc., 1961. 462p. $15.00.

341. THE APPLICATION OF RADIOISOTOPES IN HYDROLOGY. IV. MEASUREMENT AND DETECTION OF THE RADIOACTIVE TRACER I^{132}. PART 2. H. Moser and W. Rauert (Forschungsstelle fur Radiohydrometrie, Munich). Atomkernenergie, 5: 462-71(Dec. 1960). (In German)

342. APPLICATION OF TM 170 TO RADIOGRAPHIC CONTROL OF METALS. Boguslaw Osuchowski (Electro-Technical Inst., Warsaw). Nukleonika, 5: 771-85(1960). (In Polish)

343. (JLI-650-6-3) THE DEVELOPMENT OF PRINCIPLES AND METHODS OF HIGH DILUTION ON-STREAM ISOTOPIC TRACERS. (In Situ Tracer Project). Annual Report. William H. Johnston, A. F. Findeis, Marvin L. Vestal, H. R. Fechter, Paul E. Pontius, Konrad Benford, Diana River, and Morton Palmer (Johnston(William H.) Labs., Inc., Baltimore). May 1960. Contract AT(11-1)-650. 146p.

344. (NYO-9039) THE STUDY OF THE POTENTIAL APPLICATIONS OF RADIOISOTOPE TECHNOLOGY TO WATER RESOURCE INVESTIGATIONS AND UTILIZATION. Quarterly Report No. 3. Herbert W. Feely (Isotopes, Inc., Westwood, N. J.). Jan. 31, 1961. Contract AT(30-1)-2477. 89p.

345. (TID-11306) EXPLORATION OF RADIOMETRIC METHODS FOR INDUSTRIAL PROCESS CONTROL. Final Report. William J. Driscoll, Benjamin F. Scott, and Edmund A. Huff (Nuclear-Chicago Corp., Des Plaines, Ill.). Feb. 28, 1961. Contract AT(11-1)-695. 67p.

346. (CEA-tr-R-254) MESUREUR RADIOACTIF DE L'EPAISSEUR POUR LE CONTROLE CONTINU, SANS CONTACT, D'UNE BANDE DE VERRE ENCOURS DE LAMINAGE. (Radioactive Thickness Gage for Non-Contact Continuous Inspection of Glass Strips during Rolling). O. P. Nikotin and D. A. Leshchinskii (Leshchinsky). Translated into French from Steklo i Keram., 16: No. 7, 35-7(1959). 7p.

347. MEASUREMENT OF GEAR WEAR BY ACTIVATING WEAR PARTICLES IN THE LUBRICANT. Harvey D. Briggs and John F. Coultry (General Electric Co., Schenectady, N. Y.). Chem. Eng. Progr., 56: Symposium Ser. No. 28, 76-8(1960).

348. A BETA-RAY SOURCE FOR LIQUID-DENSITY MEASUREMENT. Edward J. Freeh and Clyde H. Kearns (Industrial Nucleonics Corp., Columbus, Ohio). Chem. Eng. Progr., 56: Symposium Ser. No. 28, 79-83(1960).

349. A RADIOMETRIC METHOD FOR VISCOSITY MEASUREMENTS. V. D. Goroshko and Yu. P. Gupalo (Inst. for Fossile Fuels, Academy of Sciences, USSR). Zavodskaya Lab., 27: 38-40(1961). (In Russian)

350. (JPRS-6804) ALL-UNION CONFERENCE ON THE INTRODUCTION OF RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION INTO THE NATIONAL ECONOMY OF THE USSR. Translation of Atomnaya Energ., 9: 221-41 (Sept. 1960). 58p.

351. RADIO-TRACER TECHNIQUES FOR THE STUDY OF FLOW IN SATURATED POROUS MATERIALS. H. E. Skibitzke, H. T. Chapman, G. M. Robinson, and R. A. McCullough (U. S. Geological Survey, Phoenix, Ariz.). Intern. J. Appl. Radiation and Isotopes, 10: 38-46(Feb. 1961). (In English)

352. (BMI-1499) INTRINSIC-RADIOTRACER PROCESS CONTROL. James L. McFarling, Peter Gluck, John F. Kircher, and Duane N. Sunderman (Battelle Memorial Inst., Columbus, Ohio). Feb. 10, 1961. Contract W-7405-eng-92. 44p.

353. IMPROVEMENTS IN SELF-LUMINOUS LIGHT SOURCES. (to U. S. Radium Corp.). British Patent 861,790. Feb. 22, 1961.

354. (AD-246158) DEVELOPMENT AND TESTS OF A RADIOACTIVE SEDIMENT DENSITY PROBE. Technical Memorandum No. 121. Joseph M. Caldwell (Office of the Chief of Engineers. Beach Erosion Board, Washington, D C.). Sept. 1960. 47p.

355. (AEC-tr-4139(p.45-57)) THEORETICAL FOUNDATIONS OF THE DESIGN OF RADIOACTIVE SELF-COMPENSATING LEVEL GAUGES. G. G. Iordan.

356. (AEC-tr-4139(p.58-68)) THEORETICAL PROBLEMS AND FUNDAMENTALS OF THE DESIGN OF SELF-COMPENSATING RADIOACTIVE LIQUID-DENSITY METERS. K. S. Furman.

357. (AEC-tr-4139(p.79-85)) THICKNESS GAUGE FOR ROLLED SHEET STOCK. V. K. Latyshev, Yu. S. Pliskin, L. K. Tatochenko, and A. K. Felinger.

358. (AEC-tr-4139(p.86-92)) OPERATIONAL TRIAL OF MONITORING WITH GAMMA-DENSIMETER PETROLEUM PRODUCTS CONSECUTIVELY CONVEYED THROUGH PIPELINES. A. A. Akhromenkov, Yu. S. Zaslavskii, A. A. Vargin, A. N. Kornilayev, and V. P. Lapin.

359. (AEC-tr-4139(p.93-100)) METHODS OF UTILIZATION OF GAMMA-DENSIMETERS. E. (Ye.) M. Lobanov.

360. (AEC-tr-4139(p.125-31)) CONTROL AND AUTOMATION OF OPERATION OF PETROLEUM PROCESSING UNITS BY MEANS OF RADIOMETRIC INSTRUMENTS. Yu. S. Zaslavskii, O. A. Zlobin, E. Ye.) V. Evstigne'ev (Yevstigneyev), A. A. Kadushin, and G. I. Shor.

361. (AEC-tr-4139(p.196-206)) AUTOMATIC MIXING AND PROPORTIONING APPARATUS FOR PREPARING MULTIPLE-COMPONENT MIXTURES, BASED ON UTILIZATION OF RADIOACTIVE RADIATIONS. V. E. Banashek, I. V. Gavalov, M. V. Ogilets, and V. A. Yanushkovskii.

362. (AEC-tr-4139(p.232-9)) THE USE OF RADIOACTIVE ISOTOPES FOR DETECTION OF NON-FUSIONS AND THE EFFECT OF THESE NON-FUSIONS ON DURABILITY OF WELDED JOINTS. S. V. Rumyantsev.

363. (AEC-tr-4139(p.240-9)) EUROPIUM-155 AND CERIUM-144 AS SOURCES OF RADIATION FOR GAMMA-RADIOGRAPHY OF METALS. S. V. Rumyantsev and L. N. Matsyuk.

364. (NP-10004) APPLICATIONS INDUSTRIELLES DES RADIO-ELEMENTS. (Industrial Application of Radio-elements). Alain Sola (Caisse Nationale des Marches de l'Etat, Paris). Nov. 30, 1959. 61p.

365. (NYO-2505) THE TECHNOLOGY AND APPLICATIONS OF LARGE FISSION PRODUCT BETA SOURCES. Quarterly Report for the Period January 1 to April 1, 1961. Jacques J. Weinstock, E. Y. Microcznik, and K. D. Ziegel (Radiation Applications Inc., Long Island City, N. Y.). Apr. 13, 1961. Contract AT(30-1)-2186. 9p.

366. (TID-12392) ISOTOPIC METHOD FOR AGE DETERMINATIONS OF INDUSTRIAL PRODUCTS. Quarterly Progress Report, October - December 1960. T. C. Gregson and W. R. Miller (Goodyear Tire and Rubber Co., Akron, Ohio). Contract AT(11-1)-719. 34p.

367. (AEC-tr-4139) RADIOACTIVE METHODS OF CONTROL AND REGULATION OF INDUSTRIAL PROCESSES. Transactions of Scientific-Technical Conference. N. N. Shumilovskii, I. M. Taksar, G. D. Latyshev, V. I. Verkhovskii, V. I. Sinitsyn, and V. A. Yanushkovskii, eds. Translated from a publication of the Publishing House of the Academy of Sciences, Latvian S.S.R., Riga, 1959. 315p.

368. (AEC-tr-4139(p.1-23)) AUTOMATIC PRODUCTION CONTROL WITH THE USE OF NUCLEAR RADIATIONS. N. N. Shumilovskii and L. V. Mel'ttser.

369. THE SELECTION OF RADIOISOTOPES FOR GAMMAGRAPHIC MATERIALS TESTING. R. A. Jonkers. Atoomenergie, 3: No. 1, 2-7(Jan. 1961). (In Dutch)

370. IMPROVEMENTS IN SELF LUMINOUS LAMPS. (to U. S. Radium Corp.). British Patent 861,256. Feb. 15, 1961.

371. TRACER METHODS FOR RAPID DETERMINATION OF UNIFORMITY OF MIXING. Robert M. Main (Tracerlab, Inc., Richmond, Calif.). p.74-80 of "Symposium on Applied Radiation and Radioisotope Test Methods. ASTM Special Technical Publication No. 268." Philadelphia, American Society for Testing Materials, 1960.

372. TECHNIQUE USING ^{85}Kr-LABELLED KRYPTON FOR SURFACE AREA MEASUREMENTS. D. W. Aylmore and W. B. Jepson (Univ. of Exeter, Eng.). J. Sci. Instr., 38: 156-9(Apr. 1961).

373. RADIOACTIVE RING WEAR TESTING IN RAILROAD DIESEL LOCOMOTIVES. C. F. Jursch (Southern Pacific Co., San Francisco), P. L. Pinotti, and D. R. Jones. p.3-14 of "Symposium on Applied Radiation and Radioisotope Test Methods. ASTM Special Technical Publication No. 268." Philadelphia, American Society for Testing Materials, 1960.

374. DATING OF OCEAN SEDIMENTS. D. P. Kharkar, D. Lal, N. Narsappaya, and B. Peters (Tata Inst. of Fundamental Research, Bombay). Compt. rend. congr. assoc. sci. pays Ocean Indien, 3, Tananarive, 1957. Sect. C., 39-42(1958). (In English)

375. CONTACTLESS MEASUREMENTS OF LENGTHS AND THICKNESS WITH α, β, γ OR X RAYS. F. de Pellegars. Rev. gen. electronique, No. 171, 45-6(Feb. 1961). (In French)

376. MEASUREMENT OF MOISTURE AND DENSITY IN SOILS BY THE NUCLEAR METHOD. John L. Kuranz (Nuclear Chicago Corp., Des Plaines, Ill.). p.40-54 of "Symposium on Applied Radiation and Radioisotope Test Methods. ASTM Special Technical Publication No. 268." Philadelphia, American Society for Testing Materials, 1960.

377. SYMPOSIUM ON APPLIED RADIATION AND RADIOISOTOPE TEST METHODS. Third Pacific Area National Meeting, American Society for Testing Materials, San Francisco, Calif., October 13, 1959. ASTM Special Technical Publication No. 268. Philadelphia, American Society for Testing Materials, 1960. 116p. $3.75.

378. RADIOISOTOPE METHODS OF TESTING UNIFORMITY OF COATED FABRICS. George B. Foster and Henry R. Chope (Industrial Nucleonics Corp., Columbus, Ohio). p.104-12 of "Symposium on Applied Radiation and Radioisotope Test Methods. ASTM Special Technical Publication No. 268." Philadelphia, American Society for Testing Materials, 1960.

379. (BMI-1430) PROGRESS RELATING TO CIVILIAN APPLICATIONS DURING MARCH 1960. Russell W. Dayton and Clyde R. Tipton, Jr. (Battelle Memorial Inst., Columbus, Ohio.). Apr. 1, 1960. Decl. May 13, 1960. Contract W-7405-eng-92. 100p.

380. (BMI-1496) PROGRESS RELATING TO CIVILIAN APPLICATIONS DURING JANUARY, 1961. Russell W. Dayton and Clyde R. Tipton, Jr. (Battelle Memorial Inst., Columbus, Ohio). Feb. 1, 1961. Decl. Mar. 2, 1961. Contract W-7405-eng-92. 116p.

381. (CEA-1786) NOUVEAUX DEVELOPPEMENTS DE L'ANALYSE ET DE LA MESURE DES EPAISSEURS PAR EXCITATION DES RAIES DE FLUORESCENCE AU MOYEN DE PARTICULES β. (New Developments in the Analysis and Measurement of Thicknesses by Excitation of the Fluorescent Lines by Means of β Particles). Pierre Martinelli (France. Commissariat a l'Energie Atomique. Centre d'Etudes Nucleaires, Saclay) and Georges Seibel (Institut de Recherches de la Sideurgie, St.-Germain-en-Laye, France). 1960. 34p.

382. (NP-10121) SALINE WATER CONVERSION REPORT FOR 1960. (Department of the Interior. Office of Saline Water, Washington, D. C.). Jan. 1961. 135p.

383. (NP-10132) RADIOACTIVE ISOTOPES. Series of Philippine Scientific Bibliographies No. 2. (National Inst. of Science and Tech., Manila). Nov. 1960. 51p.

384. (GMR-159) LIST OF SELECTED REFERENCES PERTAINING TO THE INDUSTRIAL APPLICATIONS OF RADIOISOTOPES AND RADIATION. W. D. Cheek and B. J. Riley (General Motors Corp., Detroit). Mar. 17, 1958. 10p.

385. (NYO-2764) THE STUDY OF INVERSE RADIOACTIVE TRACER TECHNIQUES AND APPLICATIONS OF RADIOACTIVE QUINOL CLATHRATES. Second Annual Report. Richard Bersin, Frederick J. Brousaides, David Chleck, Carlton O. Hommel, and James C. McCue (Tracerlab, Inc., Waltham, Mass.). July 1, 1960. Contract AT(30-1)-2204. 107p.

386. RADIOAKTIVIYE IZOTOPY V PRIBOROSTROENII. (Radioactive Isotopes in Instrument Manufacturing). L. K. Tatochenko. Moscow, Atomizdat, 1960. 368p.

387. (CEA-tr-X-230) L'UTILISATION DE PARATONERRES RADIOACTIFS PERMET UNE MEILLEURE PROTECTION CONTRE LES COUPS DE FOUDRE. (Use of Radioactive Lightning Rods for Better Protection Against Lightning Bolts). J. Van der Klis. Translated into French from Electronica, 12: 165-7, 171(1959). 19p.

388. UTILIZATION OF RADIOACTIVE ISOTOPES IN CONSTRUCTION. STUDY OF THE ORIGIN OF HUMIDITY IN A BUILDING AND OF LEAKS IN A DRAIN. D. J. M. Gamboa Loyarte, D. M. Del Val Cob, D. A. Plata Bedmar, and D. S. Norena De La Camara. Energia nuclear (Madred), 5: No. 17, 57-65(Jan. - Mar. 1961). (In Spanish)

389. APPLICATION OF INTRINSIC RADIOTRACERS TO THE REMOVAL OF IMPURITIES FROM INDUSTRIAL PROCESS STREAMS. J. L. McFarling, P. Gluck, J. F. Kircher, and D. N. Sunderman (Battelle Memorial Inst., Columbus, Ohio). Trans. Am. Nuclear Soc., 4: No. 1, 124-5(June 1961).

390. RADIOACTIVE TRACER METHOD FOR EVALUATING AND CONTROLLING ALUMINUM CLEANERS. M. Levine (Lockheed Aircraft Corp., Burbank, Calif.). Trans. Am. Nuclear Soc., 4: No. 1, 128-9(June 1961).

391. GAMMA-RAY DENSITY METERS: ANALYSIS AND DESIGN DATA. R. A. Semmler, F. F. Rieke, and J. E. Brugger (Univ. of Chicago). Trans. Am. Nuclear Soc., 4: No. 1, 129(June 1961).

392. NONDESTRUCTIVE TESTING OF SMALL TUBING. J. R. Grieve and A. M. Bounds (Superior Tube Co., Norristown, Penna.). Metal Progr. 78, No. 6, 110-14(1960) Dec.

393. (AEC-tr-4283) THE USE OF RADIOACTIVE ISOTOPES. (Die Verwendung Radioaktiver Isotope). Translated from an unidentified German report, [1960]. 11p. JCL.

394. (NYO-2655) THE DEVELOPMENT OF A BETA-RAY PARTICLE SIZE ANALYZER. Annual Report [for] April 1959 - May 1960. Seymour Z. Lewin, Jane Connor Sheridan, and Eric J. Hewitt (Evans Research and Development Corp., New York). Oct. 10, 1960. 44p. Contract AT(30-1)-2372. OTS.

395. (NYO-9227) EVALUATION OF THE RADIOACTIVE TRACER TECHNIQUE FOR USE IN TOOL-WEAR STUDIES. [Period covered]: February 1, 1959 - June 30, 1960. N. H. Cook (Massachusetts Inst. of Tech., Cambridge. Dept. of Mechanical Engineering). June 1960. 70p. Contract AT(30-1)-2329. OTS.

396. (TID-11234) DEVELOPMENT OF A DOUBLE THICKNESS/DOUBLE DENSITY GAMMA GAUGE. Final Report for December 1, 1958 to December 6, 1959. (Nuclear Research Corp., Southampton, Penna.). 32p. Contract AT(30-1)-2304. OTS.

397. (TID-11239) THE APPLICATIONS OF ISOTOPES TO INDUSTRIAL PROBLEMS. Progress Report Letter No. 20 for the Period October 18 to November 16, 1960. Foster F. Rieke (Chicago. Univ. Labs. for Applied Science). Nov. 18, 1960. 6p. Contract AT(11-1)-712. (LAS-L-P161-20).

398. (CEA-tr-R-910) CONTROLE RADIOMETRIQUE DU NIVEAU DES MATERIAUX CHARGES DANS UN HAUT FOURNEAU. (Radiometric Control of the Level of Material Loaded in a Blast Furnace). I. G. Polovtsev (Polovtchenko), V. N. Uzlyuk (Uzliuk), and A. L. Berin. Translated into French from Stal' 19, 204-5(1959). 9p.

399. THE APPLICATION OF RADIOISOTOPES IN HYDROLOGY. IV. MEASUREMENT AND DETECTION OF THE RADIOACTIVE TRACER ^{131}I. PART 1. H. Moser and W. Rauert (Forschungsstelle fur Radiohydrometrie, Munich). Atomkern-energie 5, 419-25(1960) Nov. (In German)

400. COLLECTION OF POLISH PAPERS SUBMITTED TO THE SECOND UNITED NATIONS CONFERENCE ON THE PEACEFUL USES OF ATOMIC ENERGY, GENEVA, SEPTEMBER 1958. Nukleonika Special Number, 1-144(1958). (In English)

401. PROGRESS IN NON-DESTRUCTIVE TESTING. VOLUME 2. E. G. Stanford and J. H. Fearon, eds. New York, The Macmillan Company, 1960. 254p. $12.00.

402. THE USES OF RADIOACTIVE ISOTOPES IN NON-DESTRUCTIVE TESTING. J. F. Cameron (Atomic Energy Research Establishment, Harwell, Berks, Eng.). p.91-164 of "Progress in Non-Destructive Testing. Volume 2."

403. APPLICATIONS OF RADIOACTIVE LEVEL GAGES AND LEVEL INDICATORS. M. A. Veksler. Khim. Prom. No. 6, 483-7(1960) Sept. (In Russian)

404. (NP-9657) ZRODLO SWIATLA Z IZOTOPEM Kr-85. Report No. 175/III. (The Light Source with Kr-85 Isotope). P. Ya. Novatski, A. Kazimerski, E. Strykhal'ski, and Yu. Ridel (Polish Academy of Sciences. Inst. of Nuclear Research, Warsaw). Sept. 1960. 13p.

405. (SRIA-19) INSTRUCTOR'S GUIDE: SURVEY OF NUCLEAR FUNDAMENTALS AND RADIOISOTOPE APPLICATIONS IN INDUSTRY. Leland H. Towle (Stanford Research Inst., Menlo Park, Calif.). July 1960. 94p. SRI Project No. IU-2922. Contract AT(04-3)-115, Project Agreement No. 16. GPO.

406. (OTS-60-21151) EXPERIMENTS IN THE USE OF COBALT AND IODINE RADIOACTIVE ISOTOPES IN LAND IMPROVEMENT INVESTIGATIONS. (Opyt Primeneniya Radioaktivnykh Izotopov Kobal'ta Ioda v Meliorativnykh Issledovaniyakh). Translated from Gidrotekh. i Meliorats. 10, No. 1, 22-9(1958). 14p. (PST-Cat.-129). OTS.

407. ADVANCES IN THE DESIGN OF VACUUM GAUGES USING RADIOACTIVE MATERIALS. J. R. Roehrig and G. F. Vanderschmidt (National Research Corp., Cambridge, Mass.). p.82-4 of "Sixth National Symposium on Vacuum Technology; Transactions, October 7, 8, and 9, 1959, Philadelphia, Pennsylvania. New York, Pergamon Press Inc., 1959."

408. (TID-6613) RADIOISOTOPES IN WORLD INDUSTRY. Abstracts of Selected Foreign Literature. (Office of Isotopes Development, AEC). Jan. 1961. 144p.

409. (TID-11586) INVESTIGATION OF THE EFFECTS OF IONIZING RADIATION ON THE SEDIMENTATION OF SEWAGE. First Quarterly Report. (Universal Match Corp., Ferguson, Mo.). Nov. 1, 1960. 56p. Contract AT(11-1)-905.

410. RADIOISOTOPES AND THEIR APPLICATIONS. Bull. inform. A.T.E.N., No. 25, 21-3(1960) Sept.-Oct. (In German)

411. SAMARIUM 145, SAMARIUM 153, GADOLINIUM 153 AND THULIUM 170 SOURCES FOR RADIOGRAPHY. Farno L. Green, Willard D. Cheek, Robert E. Black, and Nondestructive Testing 18, 382-8; 402(1960) Nov.-Dec.

412. (NP-9772) SINGLE-SCATTERING DENSITY GAUGE. Record of Invention No. 13. B. W. Schumacher (Canada. Ontario Research Foundation). Oct. 5, 1959. 9p.

413. PRINCIPLES OF RADIOACTIVE LOGGING. Janos Kakas (Radioisotope Lab. of the "Csepel" Iron and Metal Works, [Hungary]). Energia es Atomtech., 13: 510-12(1960). (In Hungarian)

414. RADIOISOTOPE MEASURING INSTRUMENT FOR DETERMINATION OF DENSITY. J. Oppelt (Inst. fur Forschung, Herstellung und Anwendung von Radioisotopen, Prague, Czechoslovakia). Isotopentechnik, 1: 23-4(Jan. 1960).

415. EXPERIENCES ON THE USE OF NONDESTRUCTIVE TESTING METHODS WITH RADIOACTIVE ISOTOPES. Jozsef Hirling and Karoly Varga (Radioisotope Lab. of the "Csepel" Iron and Metal Works, Hungary). Energia es Atomtech., 13: 513-14(1960). (In Hungarian)

416. (CRER-972) MOVEMENT OF RADIOACTIVE WASTES THROUGH SOIL. II. MEASUREMENT OF DIRECTION AND EFFECTIVE VELOCITY OF GROUND WATER MOVEMENT. W. F. Merritt (Atomic Energy of Canada Ltd., Chalk River, Ont.). Jan. 1961. 18p. (AECL-1161).

417. (NYO-8726) INDUSTRIAL APPLICATIONS OF RADIOISOTOPES. Ralph L. Ely, Jr., Eli I. Goodman, Philip C. Reilley, Joseph A. Roll, and Robert F. Weise (Nuclear Science and Engineering Corp., Pittsburgh). June 15, 1959. 57p. Contract AT(30-1)-2203.

418. (TID-6959) RADIOISOTOPE AND RADIATION APPLICATIONS. QUARTERLY PROGRESS REPORT. Duane N. Sunderman (Battelle Memorial Inst., Columbus, Ohio). February 1, 1960. 39p. Contract No. W-7405-eng-92.

419. (TID-6960) RADIOISOTOPE AND RADIATION APPLICATIONS. QUARTERLY PROGRESS REPORT. Duane N. Sunderman (Battelle Memorial Inst. Columbus, Ohio). April 21. 1960. 45p. Contract No. W-7405-eng-92.

420. (TID-6961) RADIOISOTOPE AND RADIATION APPLICATIONS. QUARTERLY PROGRESS REPORT. Duane N. Sunderman (Battelle Memorial Inst., Columbus, Ohio). July 25, 1960. 25p. Contract No. W-7405-eng-92.

421. (TID-6966) USE OF RADIOACTIVE TRACERS IN WATERFLOODING. QUARTERLY PROGRESS REPORT [Covering Period:] NOVEMBER 1, 1959 TO JANUARY 31, 1960. J. Wade Watkins (Bureau of Mines. Bartlesville Petroleum Research Center, Okla.). 5p. Contract AT(49-11)-1709.

422. (TID-6967) USE OF RADIOACTIVE TRACERS IN WATERFLOODING. QUARTERLY PROGRESS REPORT [Covering Period:] FEBRUARY 1, TO APRIL 30, 1960. J. Wade Watkins (Bureau of Mines. Bartlesville Petroleum Research Center, Okla.). 6p. Contract AT(49-11)-1709.

423. (TID-6968) USE OF RADIOACTIVE TRACERS IN WATERFLOODING. QUARTERLY PROGRESS REPORT [Covering Period:] MAY 1 TO JULY 31, 1960. J. Wade Watkins (Bureau of Mines, Bartlesville Petroleum Research Center, Okla.). 8p. Contract AT(49-11)-1709.

424. (TID-6970) USE OF RADIOACTIVE TRACERS IN WATERFLOODING. QUARTERLY PROGRESS REPORT [Covering Period:] AUGUST 1 TO SEPTEMBER 30, 1960. J. Wade Watkins (Bureau of Mines. Bartlesville Petroleum Research Center, Okla.). 6p. Contract AT(49-11)-1709.

425. A METHOD OF LEAK TESTING HERMETICALLY SEALED COMPONENTS UTILIZING RADIOACTIVE GAS. B. Cassen and D. Burnham (American Electronics, Inc., Culver City, Calif.). Intern. J. Appl. Radiation and Isotopes, 9: 54-9(Dec. 1960). (In English)

426. TRANSPORTABLE LEVEL CONTROL USING RADIOACTIVE RADIATION. V. Netz (VEB Vakutronik, Dresden, Germany). Isotopentechnik, 1: 20-2(Jan. 1960).

427. THE APPLICATION OF RADIOACTIVE ISOTOPES TO THE RADIOGRAPHIC RESEARCH OF METALS. B. Osuchowski. Nowa Tech. No. 7, 5-26(1956). (In Polish)

428. IONIZATION METHODS USED WITH THE GAMMA-RAY "DEFECTOSCOPE" APPLIED TO THICK METAL OBJECTS. I. G. Fakidow and A. A. Samochwalow. Nowa Tech. No. 7, 27-37(1956). (In Polish)

429. JPRS-5179(p.28-44) APPLICATION OF THE RADIOACTIVE ISOTOPE C^{14} FOR STUDYING ELECTROLYTIC TRANSFER OF CARBON IN METALS AND ALLOYS. Yu. F. Babikova and P. L. Gruzin. Translated from Met. i Metalloved. Chistykh Metallov No. 1, 200-12(1959).

430. NYO-9037 Isotopes, Inc., Westwood, N. J. THE STUDY OF THE POTENTIAL APPLICATIONS OF RADIOISOTOPE TECHNOLOGY TO WATER RESOURCE INVESTIGATIONS AND UTILIZATION. Quarterly Report No. 1. June 1, 1960. 62p. Contract AT(30-1)-2477. OTS.

431. NYO-9038 Isotopes, Inc., Westwood, N. J. THE STUDY OF THE POTENTIAL APPLICATIONS OF RADIOISOTOPE TECHNOLOGY TO WATER RESOURCE INVESTIGATIONS AND UTILIZATION. Quarterly Report No. 2. Sept. 15, 1960. 59p. Contract AT(30-1)-2477. OTS.

432. AEC-tr-4206(p.1-7) MEASURING THE VOLUMETRIC CONTENT OF STEAM-GENERATING ELEMENTS BY MEANS OF GAMMA RADIATION. Z. L. Miropl'skii and R. I. Shneyerova.

433. AEC-tr-4206(p.8-11) UTILIZATION OF GAMMA RADIATION IN THE STUDY OF THE BUBBLING PROCESS. G. G. Bartolomei, Ya G. Vinokur, V. A. Kolokol' tsev, and V. I. Petukhov.

434. AEC-tr-4206(p.12-15) UTILIZATION OF THE GAMMASCOPE METHOD OF STUDYING THE HYDRODYNAMIC REGIME OF A LIQUID-LIQUID SYSTEM. S. S. Kutateladze and V. N. Moskvicheva.

435. AEC-tr-4206(p.16-20) TAGGED ATOM METHOD OF INVESTIGATION OF WATER AND STEAM CONTENT DURING SURFACE BOILING OF A LIQUID. P. G. Poletavkin and N. A. Shapkin.

436. AEC-tr-4206(p.21-8) DETERMINATION OF SPECIFIC SURFACE OF QUARTZ AND CEMENT POWDERS BY THE SORPTION METHOD WITH THE USE OF TAGGED ATOMS. V. S. Kudryavtsev (Kudryavtseff).

437. AEC-tr-4206(p.29-34) USE OF RADIOACTIVE ISOTOPE S^{35} IN THE STUDY OF SULFATE CORROSION OF CONCRETE. V. M. Moskvin and I. I. Kurbatova.

438. AEC-tr-4206(p.35-40) METHODS OF DETERMINING SOIL DENSITY AND MOISTURE CONTENT BY MEANS OF RADIOACTIVE IRRADIATION. N. A. Tsytovich, V. I. Ferronskii, and V. A. Lukin.

439. AEC-tr-4206(p.41-3) STUDY OF MIGRATION PROCESSES OF MOISTURE IN CONSTRUCTION MATERIALS BY THE GAMMASCOPE METHOD. L. G. Polozova and R. P. Reizman.

440. AEC-tr-4206(p.44-8) USE OF RADIOACTIVE ISOTOPES FOR INVESTIGATING SOLUBILITY OF SALTS IN WATER VAPOR OF LARGE PARAMETERS. M. A. Styrikovich, I. Kh. Khaibullin, and L. K. Khokhlov.

441. AEC-tr-4206(p.49-54) INVESTIGATION OF THE QUALITY OF STEAM UNDER A PRESSURE OF 185 abs atm BY MEANS OF RADIOACTIVE ISOTOPES. L. S. Sterman, A. Ya. Antonov, and A. V. Surnov.

442. AEC-tr-4206(p.55-9) USE OF RADIOACTIVE ISOTOPES FOR OBSERVING THE FLOW OF MOLTEN GLASS IN GLASS FURNACE TANKS. V. A. Dubrovskii.

443. AEC-tr-4206(p.60-4) USE OF RADIOACTIVE ISOTOPES FOR THE STUDY OF FILTRATION OF LIQUIDS THROUGH POROUS MEDIA. V. V. Rachinskii.

444. AEC-tr-4206(p.65-9) RADIOACTIVE METHODS OF STUDYING THE PROCESSES OF A LIQUID FLOW IN A POROUS MEDIUM. D. I. Leipushinskaya and Ya. A. Pruslin.

445. AEC-tr-4206(p.70-5) A STUDY OF THE HYDRODYNAMICS OF A LIQUID IN THE CONICAL ROTOR OF A PRECIPITATION CENTRIFUGE BY MEANS OF RADIOACTIVE ISOTOPES. M. A. Borts, L. S. Zarubin, V. S. Kaminskii, and L. L. Korsak.

446. AEC-tr-4206-(p.76-81) RESEARCH ON THE MOTION OF WATER IN PEAT UNDER LABORATORY AND FIELD CONDITIONS BY MEANS OF RADIOACTIVE ISOTOPES. M. P. Volarovitch, N. V. Churaev, and B. A. Minkov.

447. AEC-tr-4206(p.82-8) APPLICATION OF RADIOACTIVE ISOTOPES FOR INVESTIGATING SUSPENDED SEDIMENTS IN RIVERS. M. M. Arkhangel'skii.

448. AEC-tr-4206(p.89-94) APPLICATION OF RADIOACTIVE ISOTOPES FOR STUDYING THE MECHANISM OF THE PROCESS OF DRYING. A. I. Veinik and A. S. Shubin.

449. UTILIZATION OF RADIOISOTOPES AND NUCLEAR RADIATION IN THE STUDY OF FLOTATION PROCESSES. Igor Nikolaevici Plaxin. Acad. rep. populare Romine, Studii cercetari met. 5, 229-48(1960). (In Rumanian)

450. LES TRACEURS RADIOACTIFS EN METALLURGIE PHYSIQUE. (Radioactive Tracers in Physical Metallurgy). C. Leymonie. Paris, Dunod, 1960. 233p.

451. APPLICATION OF LARGE COBALT-60 SOURCES TO GAMMA-RADIOGRAPHY OF METALS. Jozef Domanus and Boguslaw Osuchowski (Electrotechnical Inst., Warsaw). Nukleonika 5, 281-300(1960). (In English)

452. APPLICATIONS OF RADIOISOTOPES IN PROBLEMS OF METALLIC CORROSION. P. Lacombe (Ecole des Mines, Paris). Corrosion et anti-corrosion 8, 215-30(1960) June.

453. NP-tr-486(p.131-44) THE USE OF THE RADIOACTIVE ISOTOPE OF HYDROGEN, TRITIUM, TO INVESTIGATE CERTAIN METALLURGICAL AND METAL-SCIENCE QUESTIONS. G. I. Nikolaev (Nikolayev) and B. I. Bruk.

454. RADIOACTIVE BATTERY. (to Universal Winding Co.). British Patent 853,930. Nov. 9, 1960.

455. MEASUREMENTS OF THIN COATINGS ON THICK BASES. V. Ya. Dudarev (Moscow State Univ.). Pribory i Tekh. Ekspt. No. 4, 123-6(1960) July - Aug. (In Russian)

456. (NP-9426) MEASUREMENT OF THE WEAR RATE OF CAST GRINDING BALLS USING RADIOACTIVE TRACERS. J. D. Keys and G. G. Eichholz. Canada. Dept. of Mines and Technical Surveys. Mines Branch. June 1960. 18p.

457. (SSC-121) MANUAL OF ISOTOPE RADIOGRAPHY. Final Report. E. L. Criscuolo, D. Polansky, and C. H. Dyer (Naval Ordnance Lab., White Oak, Md.). May 23, 1960. 52p. Project SR-127. (AD-237536).

458. (TID-6956) USE OF RADIOISOTOPES IN THE STUDY OF METAL-TO-METAL WEAR OF HARDENED IRON-BASE ALLOYS. Quarterly Report No. 1. A. Talento and Gary Steven. Crucible Steel Co. of America, Pittsburgh. Apr. 15, 1959. 46p. Contract AT(30-1)-2291. OTS.

459. (TID-6957) USE OF RADIOISOTOPES IN THE STUDY OF METAL-TO-METAL WEAR OF HARDENED IRON-BASE ALLOYS. Summary Report for January 1959 - July 1959. Gary Steven. Crucible Steel Co. of America, Pittsburgh. 12p. Contract AT(30-1)-2291. OTS.

460. (TID-6962) DETERMINATION OF THE UNIFORMITY OF MIXING OF PORTLAND CEMENT CONCRETE AND BITUMINOUS CONCRETE FOR VARIOUS MIXING TIMES BY THE USE OF RADIOISOTOPES. Quarterly Technical Status Report No. 3 Covering the Period June 1, 1960 to August 31, 1960. Donald O. Covault (Georgia Inst. of Tech., Atlanta. Engineering Experiment Station). Sept. 10, 1960. 7p. Project No. A-446-7. Contract AT(30-1)-202. OTS.

461. (TID-6978) AN INVESTIGATION OF THE USE OF RADIOACTIVE ISOTOPES FOR DETERMINING THE SURFACE AREA OF POWDERED MATERIALS BY SORPTION METHODS. Quarterly Technical Status Report No. 4 covering Period: April 1, 1960 to June 30, 1960. Margaret C. Kordecki and Miriam L. Gandy (Georgia Inst. of Tech., Atlanta. Engineering Experiment Station). July 10, 1960. 10p. Project No. A-446-3. Contract AT(38-1)-202. OTS.

462. (TID-6979) AN INVESTIGATION OF THE USE OF RADIOACTIVE ISOTOPES FOR DETERMINING THE SURFACE AREA OF POWDERED MATERIALS BY SORPTION METHODS. Quarterly Technical Status Report No. 5 Covering the Period July 1, 1960 to September 30, 1960. Margaret C. Kordecki and Miriam B. Gandy (Georgia Inst. of Tech., Atlanta. Engineering Experiment Station). Oct. 10, 1960. 16p. Project No. A-446-3. Contract AT(38-1)-202. OTS.

463. A NEW RADIOLOGICAL VACUUM GAUGE. G. Frederick Vanderschmidt and John C. Simons, Jr. (National Research Corp., Cambridge, Mass.). p.305-7 of "Advances in International Congress on Vacuum Techniques, 10-13 June 1958, Namur, Belgium. E. Thomas, ed. Volume I. Fundamental Problems in Vacuum Techniques, Ultra-High Vacuum. Volume II. Vacuum Systems Applications in Various Sciences and Techniques." New York, Pergamon Press, 1960. (In English)

464. NYO-8919 Carnegie Inst. of Tech., Pittsburgh. THORIUM ISOTOPES METHOD FOR DATING MARINE SEDIMENTS (thesis). Ismael Almodovar. May 31, 1960. 125p. Contract AT(30-1)-844. OTS.

465. FINDING PIPING LEAKS WITH SEALED MILLICURIE FLOATS. Robert E. Black and Walter Kerwick (General Motors Research Labs., Warren, Mich.). Nucleonics 18, No. 8, 106-8(1960) Aug.

466. THE POTENTIAL AND APPLICATION OF THE SYNTHETIC RADIOACTIVE ISOTOPE IN VACUUM RESEARCH AND TECHNOLOGY. Luther E. Preuss (Edsel B. Ford Inst. for Medical Research, Detroit). p.114-24 of "Advances in Vacuum Science and Technology. Proceedings of the First International Congress on Vacuum Techniques, 10-13 June 1958, Namur, Belgium. E. Thomas, ed. Volume I. Fundamental Problems in Vacuum Techniques, Ultra-High Vacuum. Volume II. Vacuum Systems Applications in Various Sciences and Techniques." New York, Pergamon Press, 1960. (In English)

467. THE KINETICS OF GAMMA-RAY INDUCED COLORING OF GLASS. Paul W. Levy (Brookhaven National Lab., Upton, N. Y.). J. Am. Ceram. Soc. 43, 389-95(1960) Aug.

468. STUDY OF AIR DISTRIBUTION IN A HAY-VENTILATION SYSTEM USING RADIOISOTOPES. A. Suss, F. Baumgartner, and A. Mannl (Technische Hochschule, Munich). Atompraxis 6, 138-42(1960) Apr. - May. (In German)

469. DENSITY AND THICKNESS MEASUREMENT BY GAMMA PENETRATION PROCEDURES USING SCINTILLOMETERS. A. Trost. Atompraxis 6, 121-4(1960) Apr.-May. (In German)

470. THE USE OF RADIOACTIVE ISOTOPES IN THE REGULATION OF FLUID LEVEL. J. Domanus and B. Kaminski. Przemysl Chem. 37, 673-6(1958). (Translated from Referat. Zhur. Khim. No. 20, 1959, abstract No. 71740).

471. NP-tr-469 APPLICATION OF RADIOISOTOPES IN HYDROLOGY AND HYDRAULICS. PARTS I AND II. (Die Verwendung von Radioisotopen in der Hydrologie und Hydraulik). A. Montens. Translated by F. Hudswell (U.K.A.E.A. Atomic Energy Research Establishment) from Atompraxis 5, 91-3; 182-7(1959). 30p. (Includes 5p. of original). JCL.

472. Atomic Energy Commission, [Washington, D. C.]. USES OF ISOTOPES IN INDUSTRY AND IN PHYSICAL AND CHEMICAL RESEARCH. 1959. 20p.

473. AN IMPROVED BALANCING UNIT FOR USE WITH RADIATION GAUGES. (to Gordon Francis Wellington Powell). British Patent 843,856. Aug. 10, 1960.

474. TID-3903 Division of Biology and Medicine, AEC. A SELECTED LIST OF REFERENCES ON MARINE AND AQUATIC RADIOBIOLOGY. A. W. Klement, Jr., and I. E. Wallen, comps. May 20, 1960. 44p. OTS.

475. RADIATION TECHNIQUES FOR PROCESS MEASUREMENTS. Alfred H. McKinney [(E. I. Du Pont de Nemours & Co., Wilmington, Del.)]. Chem. Eng. Progr. 56, 37-8(1960) Sept.

476. AEC-tr-4100 RADIOHYDROGEOLOGY. (Radiogidrogeologiya). A. N. Tokarev and A. V. Shcherbakov. A translation from a publication of the State Publishers of Scientific-Technical Literature on Geology and Conservation of Natural Resources, Moscow, 1956. 353p. OTS.

477. THE APPLICATION OF RADIOACTIVE ISOTOPES IN PROCESS ENGINEERING. Konrad Sagel (Metall-Laboratoriums der Metallgesellschaft AG, Frankfurt am Main). VDI Zeitschrift 102, No. 23, 1095-1102(1960) Aug. 11. (In German)

478. RADIOLOGICZNA KONTROLA PRODUKCJI. (Radiological Control of Production). Maciej Radwan and Andrzej Pradzynski. Warsaw, Panstwowe Wydawnictwa Techniczne, 1957. 314p.

479. INVISIBLE MARKING OF MATERIALS. (to United Kingdom Atomic Energy Authority). British Patent 850,161. Sept. 28, 1960.

480. APPLICATION OF RADIOELEMENTS TO THE STUDY OF THE PURIFICATION OF ALUMINUM. Ph. Albert, J. Gaittet, and G. Chaudron. Compt. rend. congr. intern. chim. ind., 31e, Liege, Belg., 1958 1, 809-12. (In French)

481. UCRL-Trans-501(L) AN INVESTIGATION OF SALT CARRY OFF BY STEAM USING RADIOACTIVE ISOTOPES. A. A. Andreevskii and Yu. V. Zenkevich. Translated by Esther S. Goldberg from Teploenergetika 2, No. 9, 37-42(1955). 18p. (Includes original, 6p.). JCL or LC.

482. AECL-1105 Atomic Energy of Canada Ltd. Commercial Products Div., Ottawa. THE AECL RADIOISOTOPE HANDBOOK. June 1, 1960. 65p.

483. CEA-tr-A-716 L'UTILISATION DES ISOTOPES RADIOACTIFS DANS LA RECHERCHE METALLOGRAPHIQUE. (Use of Radioisotopes in Metallographic Research). K. Sagel. Translated into French from Metall 13, 25-30 (1959). 29p.

484. PIERWSZE KRAJOWE SYMPOZJUM POSWIECONE STOSOWANIU IZOTOPOW PROMIENIOTWORCZYCH W TECHNICE, 8-12 CZERWIEC, 1960 - ROGOW. (First National Symposium on the Application of Radioisotopes to Technology, 8-12 June, 1960, Rogow). Warsaw, National Council for the Peaceful Uses of Nuclear Energy, 1960. 139p.

485. (TID-16338) RADIOISOTOPES RESEARCH, DEVELOPMENT, AND RELATED ACTIVITIES. Quarterly Progress Report No. 14, March 15 - June 15, 1962. (Chicago. Univ. Labs. for Applied Science). July 1962. Contract AT(11-1)-712. 42p. (LAS-SR-161-47)

486. RADIOISOTOPES. PRETORIA, 1957. Publication No. 28. London, C.C.T.A./C.S.A., 1959. 233p. $6.25 (New York, International Publications Service).

487. RADIO-ACTIVE TRANSDUCER. S. Wanetick (to U. S. Atomic Energy Commission). U. S. Patent 3,024,364. Mar. 6, 1962.

488. A DIRECT RADIOISOTOPE METHOD OF INVESTIGATING THE WEAR OF WIRE DRAWING DIES. PART I AND II. J. Kleszniewski. Wire Ind., 28: 991-3 (Oct. 1961); 1111-16(Nov. 1961).

489. (EURAEC-304) NON-DESTRUCTIVE TEST WELDING. Quarterly Report No. 3, January-March 1962. (Rontgen Technische Dienst N. V., Rotterdam). Apr. 27, 1962. Work Performed under United States-Euratom Joint Research and Development Program. 33p.

490. ISOTOPIC SPEED GAGES FOR MEASURING THE WATER CIRCULATION IN STEAM GENERATORS 130 T/H 40 ATM. W. Wisniewski. 11p. of "Pierwsze Krajowe Sympozjum Zastosowaii Izotopow w Technice." Warsaw, Osrodek Informacji, 1961.

491. (UCRL-6243) MOBILE UNIT FOR NONDESTRUCTIVE TESTING IN THE FIELD. A. A. Wisgardie and J. K. Wheater (California. Univ., Livermore. Lawrence Radiation Lab.). Dec. 1960. Contract W-7405-eng-48. 10p.

492. FOR NONDESTRUCTIVE TESTING NEUTRON RADIOGRAPHY. Harold Berger (Argonne National Lab., Ill.). Nucleonics, 20: 77-81(Sept. 1962).

493. DEVELOPMENT AND APPLICATION OF RADIOGRAPHIC TECHNIQUES. Gerold H. Tenney (Los Alamos Scientific Lab., N. Mex.). Preprint Paper No. 22. New York, Engineers Joint Council, 1962. 27p.

494. THE COMBINED APPLICATION OF ULTRASONIC METHOD AND GAMMA RAYS IN TESTING THE QUALITY OF CONCRETE IN BUILDING CONSTRUCTIONS. L. Brunarski, J. Basin, and R. Makarow. 13p. of "Pierwsze Krajowe Sympozjum Zastosowaii Izotopow w Technice." Warsaw, Osrodek Informacji, 1961.

495. APPARATUS FOR MEASURING MOISTURE OF SAND USING THE NEUTRON METHOD. M. Borowczyk. 8p. of "Pierwsze Krajowe Sympozjum Zastosowaii Izotopow w Technice." Warsaw, Osrodek Informacji, 1961.

496. (JLI-650-9-1) HIGH DILUTION ON-STREAM ISOTOPIC TRACERS. Annual Report. (Johnston (William H.) Labs., Inc., Baltimore). May 1961. Contract AT(11-1)-650. 206p.

497. (DPR/INF/268) ACCURATE MEASUREMENT OF TURBULENT FLOW IN PIPES USING RADIOACTIVE ISOTOPES. C. G. Clayton (United Kingdom Atomic Energy Authority. Research Group. Isotope Research Div., Wantage, Berks, England and United Kingdom Atomic Energy Authority. Research Group. Wantage Research Lab., Wantage, Berks, England). June 1962. 15p.

498. (IA-730) APPLICATION OF RADIOISOTOPES IN LUMINOUS DEVICES. PART I. SURVEY OF SELF-ILLUMINATING SYSTEMS. A. Heller and M. Anbar (Israel. Atomic Energy Commission, Tel Aviv). July 1962. 10p.

499. (NYO-10142) RESEARCH ON APPLICATIONS OF KRYPTON 85. Quarterly Progress Report No. 2, January 1, 1962-March 31, 1962. W. G. Marancik and P. S. Minetti (Air Reduction Co., Inc. Central Research Labs., Murray Hill, N. J.). Contract AT(30-1)-2906. 25p.

500. RECENT DEVELOPMENT IN RADIOISOTOPE NON-DESTRUCTIVE TESTING. J. F. Hauck (Lockheed Nuclear Products, Atlanta). Preprint. [Ottawa], Canadian Nuclear Association, 1962. 8p. $0.50.

501. NUKLEARNA ENERGIJA U JOGOSLAVIJI. (Nuclear Energy in Yugoslavia). Slobodan Nakicenovic, ed. Beograd, Export Press, 1961.

502. THE PCY-1 (RSU-1) RADIOISOTOPE TRACKING LEVEL GAGE. V. S. Gostishchev and A. D. Kulikov. Byull. Tekh.-Ekon. Inform., Ministerstvo Morsk. Flota, No. 2, 26-9(1962).

503. (JLI-2748-0-5) BASIC AND APPLIED RADIOTRACER STUDIES. Annual Report, March 1, 1961 - February 28, 1962. William H. Johnston (Johnston (William H.) Labs., Inc., Baltimore). June 1962. Contract AT(30-1)-2748. 164p.

504. (NP-tr-921) PROBLEMS OF INDUSTRIAL ISOTOPE MEASUREMENT TECHNIQUES. PARTS I AND II. E. Schurz. Translated by F. Hudswell (U.K.A.E.A. Atomic Energy Research Establishment, Harwell, Berks, Eng.) from Isotopen Tech., No. 1, 136-7; 200-3(1960/61). 23p. (Includes original, 4p.).

505. RADIOAKTIVNYE IZOTOPY I YADERNYE IZLUCHENIYA V NARODNOM KHOZYAISTVE SSSR. (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR). Radioaktivn. Izotopy i Yadernye Izlucheniya v Nar. Khoz. SSSR, Tr. Vses. Soveshch., Riga, 1960, 2: 1-267(1961).

506. RADIOACTIVE METHOD OF ACTIVE CONTROL IN AUTOMATIC STAMPING. V. T. Meshcherin, A. E. Artes, and V. A. Yanushkovskii. Radioaktivn. Izotopy i Yadernye Izlucheniya v Nar. Khoz. SSSR, Tr. Vses. Soveshch., Riga, 1960, 3: 17-22(1961).

507. STUDYING THE NATURE OF METAL DEFORMATION DURING ROLLING WITH THE AID OF RADIOACTIVE ISOTOPES. O. I. Val'ter, V. A. Kostyuk, N. P. Kologrivov, and Z. A. Yashchenko. Radioaktivn. Izotopy i Yadernye Izlucheniya v Nar. Khoz. SSSR, Tr. Vses. Soveshch., Riga, 1960, 3: 207-9(1961).

508. NYO-2977 National Industrial Conference Board, Inc., New York. RADIOISOTOPES IN INDUSTRY. John J. McMahon and Arnold Berman. [Nov. 1959]. 136p. Contract AT(30-1)-2135. OTS and NICB.

509. MEASUREMENT OF SOFT β-RADIATION IN THE THICK LAYER OF A SUBSTANCE. N. A. Fedorov. Med. Radiol. 5, No. 1, 58-60(1960) Jan. (In Russian)

510. USE OF RADIOISOTOPES IN APPLIED GEOLOGY. Immo Wendt (Bundesanstalt fur bodenforschung, Hanover). Kerntecknik 2, 1-9(1960) Jan. (In German)

511. AECU-4712 Massachusetts Inst. of Tech., Cambridge. PROGRESS REPORT ON DEVELOPMENT OF RADIOISOTOPE TRACER TECHNIQUES FOR STUDYING DECOMPOSITION OF COMPLEX ORGANIC WASTES. Period covered: February 1, 1959 to January 31, 1960. Ross E. McKinney. 8p. Contract AT(30-1)-2329. OTS.

512. TRACERS TEST EFFICIENCY OF AIR-COMPRESSOR FILTERS. Ralph L. Ely, Jr. (Nuclear Science and Engineering Corp., Pittsburgh) and Jerome R. Pier (Westinghouse Air Brake Co., Pittsburgh). Nucleonics 18, No. 3, 130: 132-3(1960) Mar.

513. CONTINUOUS THICKNESS MEASUREMENT USING RADIATION IN ROLLING. Hans Hart. Z. Metallk. 51, 120-31(1960) Feb. (In German)

514. TRACING OF WATER FLOW BY MEANS OF RADIOACTIVE ISOTOPES AND SCINTILLATION COUNTERS. D. E. Hull (California Research Corp., Richmond). Intern. J. Appl. Radiation and Isotopes 7, 260(1960) Jan. (In English)

515. NUCLEAR TECHNOLOGY FOR ENGINEERS. R. Hobart Ellis, Jr. New York, McGraw-Hill Book Company, Inc., 1959. 291p.

516. General Motors Inst., Flint, Mich. RADIOISOTOPES IN INDUSTRY TRAINING PROGRAM. VOLUME II. John P. Danforth and Robert P. Stapp, eds. 1959. 835p. OTS.

517. AECU-4711 Goodyear Tire and Rubber Co., Akron, Ohio. ISOTOPIC METHOD FOR AGE DETERMINATIONS OF INDUSTRIAL PRODUCTS. Monthly Progress Letter [for] January 1960. T. C. Gregson and L. B. Bangs. 5p. Contract AT(11-1)-719. OTS.

518. (AD-20 350) Missouri U., Columbia. TECHNIQUES FOR HANDLING AND USING Ba^{140} AS A TRACER, by John H. Affleck, Harold John, and Louis V. Holroyd. 15 Oct. 1953, 11p. illus. (Technical report no. 15) (Contract N7onr-292, T. O. 5).

519. AECU-4724 Goodyear Tire and Rubber Co., Akron, Ohio. ISOTOPIC METHOD FOR AGE DETERMINATION OF INDUSTRIAL PRODUCTS. Quarterly Progress Report for October - December 1959. T. C. Gregson and L. B. Bangs. 52p. Contract AT(11-1)-719. OTS.

520. TID-7571(p.14-20) National Cooperative Refinery Assn., McPherson, Kan. AN INDUSTRIAL APPLICATION OF COBALT 60. L. P. Aeschliman. 7p.

521. TID-7571(p.39-63) Martin Co. Nuclear Div., Baltimore. INDUSTRIAL UTILIZATION OF RADIOISOTOPES. Jerome G. Morse. 25p.

522. TID-7571(p.115-27) Nuclear-Chicago Corp., Chicago. TRACER APPLICATIONS. John L. Kuranz. 13p.

523. TID-7571(p.172-6) Midwest Research Inst., Kansas City, Mo. APPLICATIONS OF RADIOISOTOPES AT MIDWEST RESEARCH INSTITUTE. C. W. Stanley. 5p.

524. RADIOACTIVE CYLINDERS. A TOOL FOR WEAR RESEARCH. Preprint 126A. W. C. Arnold and V. T. Stonehocker (Fairbanks, Morse and Co., Beloit, Wis.). W. J. Braun and D. N. Sunderman (Battelle Memorial Inst., Columbus, Ohio). New York, Society of Automotive Engineers, Inc., 1960. 13p.

525. SCTM-381-59(16) Sandia Corp., Albuquerque, N. Mex. A METHOD FOR DETERMINING THE CURIE LOADING OF Kr^{85} IN NUCLEAR BATTERIES. Alex Thom. Jan. 8, 1960. 16p. OTS.

526. TID-7571(p.128-32) Saint Louis Testing Labs., Mo. USE OF RADIOISOTOPES FOR RADIOGRAPHY OF WELDMENTS AND CASTINGS. C. D. Trowbridge. 5p.

527. TID-7571(p.229-46) Picker X-Ray Corp., White Plains, N. Y. THE ROLE OF ISOTOPES IN INDUSTRIAL RADIOGRAPHY. J. A. Reynolds. 18p.

528. NEW USE FOR RADIOACTIVE TRACERS, CHECKING FURNACE ATMOSPHERES. A Simple Arrangement, Using Kr^{85}, Keeps Tab on Operation of Heat-treating Furnaces. C. O. Reiser (Arizona State Univ., Tempe) and K. L. Wilson (Boeing Airplane Co., Seattle). J. Metals 12, 234-5(1960) Mar.

529. NP-8426 Naval Engineering Experiment Station, Annapolis. AN INVESTIGATION OF DIESEL ENGINE OIL FILTRATION AND ABRASIVE WEAR WITH HIGH DETERGENCY LUBRICANTS BY MEANS OF RADIOACTIVE TRACER TECHNIQUES. Harry Halliwell. Aug. 20, 1959. 32p. (EES-620320A and EES-830003).

530. A PRACTICAL LEVEL DETECTOR. J. J. Arlman and H. N. L. Hoevenaar. Ingenieur, (Utrecht) 71, Ch8-9(1959). (In Dutch)

531. CEA-1269 France. Commissariat a l'Energie Atomique, Paris and France. Electricite de France, Paris. APPLICATION DES ISOTOPES RADIOACTIFS A L'ETUDE DES MOUVEMENTS DES SEDIMENTS ET DES GALETS DANS LES COURS D'EAU ET EN MER. (The Application of Radioactive Isotopes to the Study of Motion of Silt and Pebbles in the Rivers and in the Sea). R. Hours and P. Jaffry. 1959. 31p.

532. Japan. National Diet Library, Tokyo. A BIBLIOGRAPHY ON RADIOISOTOPES. 1959. 25p.

533. AECL-971(p.37-53) Atomic Energy of Canada Ltd., Chalk River, Ont. THE USES OF RADIOISOTOPES. R. F. Errington. 17p.

534. CEA-1271 France. Laboratoire National d'Hydraulique, Chatou and France. Commissariat a l'Energie Atomique, Paris. L'ETUDE DU TRANSPORT LITTORAL PAR LA METHODE DES TRACEURS RADIOACTIFS. (Beach Sediment Drift Study by Means of Radioactive Tracers). Pierre Jaffry and Richard Hours. 1959. 35p.

535. MLM-1040 Mound Lab., Miamisburg, Ohio. DETERMINATION OF THE LIQUID LEVEL IN A STEEL CYLINDER BY GAMMA ABSORPTION. E. H. Daggett, J. M. Goode, J. W. Heyd, and R. L. Shipp. Sept. 22, 1952. 15p. Contract AT 33-1-GEN-53. OTS.

536. FUNDAMENTAL STUDY OF THE ATOMIC BATTERY. Chiyoe Yamanaka, Hiroshi Wada, and Yutaka Yamamura. Technol. Repts. Osaka Univ. 8, 233-41(1958) Oct. (In English)

537. Atomic Energy Commission, Washington, D. C. RADIOISOTOPES IN SCIENCE AND INDUSTRY. Jan. 1960. 188p. $1.25(GPO).

538. MIL-STD-271A(Ships) Department of Defense, Washington, D. C. MILITARY STANDARD NONDESTRUCTIVE REQUIREMENTS FOR METALS. Jan. 2, 1959. 30p.

539. NP-8657 Australia. Commonwealth X-Ray and Radium Lab., Melbourne. IONIZING RADIATIONS IN INDUSTRY AND SANITARY ENGINEERING: APPLICATIONS-TECHNIQUES-SAFEGUARDS. Library Information Bulletin No. 29. Jan. 1960. 10p.

540. TECHNOLOGICAL PRINCIPLES FOR DESIGNING GAMMA-ACTIVE ISOTOPE APPLICATORS. Laszlo Tihanyi (Highway and Railroad Planning Enterprise). Energia es Atomtech. 12, 492-8(1959) July-Aug. (In Hungarian)

541. MATERIALS TESTING WITH RADIOACTIVE ISOTOPES. VDI Zeitschrift 102, 424(1960) Apr. 11. (In German)

542. SOME USES OF AUTORADIOGRAPHY IN THE METALLURGICAL INDUSTRY. Jozsef Fodor (Csepel Iron and Steel Works). Energia es Atomtech. 12, 275-8 (1959) May-June. (In Hungarian)

543. NP-8386 Canada. Ontario Research Foundation. BETA-RAY GAUGES FOR GAS DENSITY MEASUREMENTS. Physics Research Report No. 6001. B. W. Schumacher. Jan. 18, 1960. 25p. 1 illus.

544. TID-5905 Chicago. Univ., Chicago Midway Labs. THE APPLICATIONS OF ISOTOPES TO INDUSTRIAL PROBLEMS. Progress Report No. 13 for period March 16 to April 15, 1960. Foster F. Rieke. Apr. 20, 1960. 12p. Contract AT(11-1)-712. OTS. (LAS-L-P161-13).

545. APPLICATION OF RADIOISOTOPES IN POLAND IN 1958. Roman Broszkiewicz (Inst. of Nuclear Research, Polish Academy of Sciences, Warsaw). Nukleonika 4, 611-24(1959). (In Polish)

546. DETERMINATION OF GAS EFFUSION USING ISOTOPES. Kernenergie 1, 146-7(1958) Feb. (In German)

547. EXPLORATION OF UNDERGROUND WATER MOVEMENTS WITH RADIOISOTOPES. Laszlo Bozoky and Daniel Vodros. Energia es Atomtech. 13, 135-6(1960) Mar. (In Hungarian)

548. TID-5969 Chicago. Univ. Chicago Midway Labs. THE APPLICATIONS OF ISOTOPES TO INDUSTRIAL PROBLEMS. Progress Report No. 14 for April 16 to May 16, 1960. Foster F. Rieke. May 20, 1960. 17p. Contract AT(11-1)-712. (LAS-L-P161-14). OTS.

549. NEW ASPECTS IN THE TESTING OF WELDS WITH RADIOISOTOPES. Jeno Semadam (Power Plant Repair and Maintenance Enterprise, Hungary). Energia es Atomtech. 13, 75-8(1960) Jan.-Feb. (In Hungarian)

550. THE RANGE OF APPLICATION OF RADIOISOTOPES FOR INDUSTRIAL THICKNESS MEASUREMENTS. H. Westmeyer (Forschungsinstitut Manfred von Ardenne, Dresden). Kernenergie 1, 93-4(1958) Feb. (In German)

551. TRANSACTIONS OF THE AMERICAN NUCLEAR SOCIETY, 1960 ANNUAL MEETING, CHICAGO, ILLINOIS, JUNE 13-15, 1960. Frank Ward, ed. Trans. Am. Nuclear Soc. 3, No. 1, 326p.(1960) June.

552. NP-8745 Israel. Water Planning for Israel Ltd., Tel Aviv. USE OF RADIOISOTOPES IN STUDIES OF GROUNDWATER FLOW. E. Halevy and A. Nir. Apr. 1960. 41p.

553. AEC-tr-4099 RADIOACTIVE DENSITY DETERMINATION WITH THE GAMMA-GAMMA-PROBE. Radioaktive Dichtebestimmung mit der Gamma-Gamma-Sonde). Joachim Homilius, Siegfried Lorch, and Konrad Seitz. Translated from Geol. Jahrb. 75, 183-96(1958). 19p. JCL.

554. TID-6060 Goodyear Tire and Rubber Co., Akron, Ohio. ISOTOPIC METHOD FOR AGE DETERMINATIONS OF INDUSTRIAL PRODUCTS. Monthly Progress Letter for April 1960. T. C. Gregson and L. B. Bangs. 3p. Contract AT(11-1)-719. OTS.

555. DETERMINATION OF THE MOISTURE CONTENT OF BUILDING MATERIALS BY GAMMASCOPY. Kernenergie 1, 224(1958) Mar. (In German)

556. BMI-1330 Battelle Memorial Inst., Columbus, Ohio. PROGRESS RELATING TO CIVILIAN APPLICATIONS DURING MARCH 1959. Russell W. Dayton and Clyde R. Tipton, Jr. Apr. 1, 1959. Decl. June 12, 1959. 90p. Contract W-7405-eng-92. OTS.

557. RADIOACTIVE GAGES FOR AIR-COOLED TURBINE BLADES. I. LIQUID-SOURCE GAGE FOR HOLLOW BLADES AND VANES. William J. Mayer and Walter H. Lange (General Motors Corp., Warren, Mich.) and William L. Shelly (General Motors Corp., Indianapolis). II. SCANNING BETA GAGE FOR COOLING-CHANNEL WALLS. Herbert E. Farmer (General Electric Co., Lynn, Mass.). Nucleonics 18, No. 7, 64-8(1960) July.

558. AD-227361 Kaman Aircraft Corp., Bloomfield, Conn. DEVELOPMENT AND FABRICATION OF NON-DESTRUCTIVE SPECIFIC GRAVITY MEASURING EQUIPMENT EMPLOYING RADIATION TECHNIQUE. Monthly Progress Report for July 1959. 10p. Contract DA-19-059-501-ORD-2631. (KAC-58-92-PR-14).

559. AERE-R-3027 United Kingdom Atomic Energy Authority. Research Group. Wantage Radiation Lab., Harwell, Berks, England. INVESTIGATION INTO THE POSSIBILITY OF USING RADIOACTIVE TRACER METHODS FOR TESTING FILTERS. Jillian W. Webb. Apr. 1960. 33p. BIS.

560. TID-6151 Chicago. Univ. Chicago Midway Labs. THE APPLICATIONS OF ISOTOPES TO INDUSTRIAL PROBLEMS. Progress Report Letter No. 15 for the period May 16 to June 15, 1960. Foster F. Rieke. June 20, 1960. 11p. Contract AT(11-1)-712. (LAS-L-P161-15). OTS.

561. WADC-TR-59-659 Arkansas. Univ., Little Rock. Graduate Inst. of Tech. USE OF RADIOACTIVE IODINE VAPOR FOR DETERMINING SURFACE ROUGHNESS. M. K. Testerman. Dec. 1959. 47p. Project No. 7022. Contract AF33(616)-5541. OTS.

562. JPRS-2765 THE RESULTS OF TESTING THE GAMMA MOISTURE GAUGE IVP-64. Yu. S. Mel'nik. Translated from Meteorol. i Gidrol. No. 2, 35-8(1960). 11p. OTS.

563. THE USE OF RADIOACTIVE ISOTOPES FOR THE MEASUREMENT OF THE MOISTURE CONTENT OF STEAM. M. I. Korsunskii, A. S. Lagunov, L. P. Baivel', and A. N. Sinel'nikov. Izmeritel'naya Tekh. No. 5, 50-2(1960). (In Russian)

564. NP-tr-448(p.393-409) APPLICATION OF A QUANTITATIVE AUTORADIOGRAPHY METHOD TO THE INVESTIGATION OF MICROINHOMOGENEITY OF MAGNESIUM ALLOYS. Z. A. Sviderskaya, M. E. Drits, and E. S. Kadaner. p.393-409 of METALLURGY AND METALLOGRAPHY.

565. A HIGH PRECISION DENSITY TIMES THICKNESS GAGE. Grover M. Taylor (Los Alamos Scientific Lab., N. Mex.). p.231-7 of "Symposium on Nondestructive Tests in the Field of Nuclear Energy. Presented in Chicago, Ill., April 16-18, 1957. ASTM Special Technical Publication No. 223." Philadelphia, American Society for Testing Materials, 1958.

566. SURVEY OF RADIATION TECHNIQUES. Gerold H. Tenney (Los Alamos Scientific Lab., N. Mex.). p.44-61 of "Symposium on Nondestructive Tests in the Field of Nuclear Energy. Presented in Chicago, Ill., April 16-18, 1957. ASTM Special Technical Publication No. 223." Philadelphia, American Society for Testing Materials, 1958.

567. INDUSTRIAL USES OF RADIOISOTOPES. F. D. R. Butement (Univ. of Liverpool). Bol. inform. junta control energia atomica (Peru) 5, 12-20 (1960) Jan.-Feb. (In Spanish)

568. (AD-282-245) PHOTOCOCAT, A PHOTOEMISSIVE COLD CATHODE. Supplementry Report. Nathan Sclar (Nuclear Corp. of America, Denville, N. J.) 1962. Contract NO bsr-77591. 15p.

569. (AD-275-297) PROCEEDINGS OF THE BUREAU OF NAVAL WEAPONS MISSILES AND ROCKETS SYMPOSIUM, CONCORD, CALIFORNIA, 18-21 APRIL, 1961. Naval Ammunition Depot, Concord, Calif. Apr. 61. 351p.

570. (AD-274-280) NAP-100 THERMOELECTRIC GENERATOR REPORT. G. Spira and T. M. Corry (Westinghouse Electric Corp., Cheswick, Pa.). Nov. 61. Contract AF-30(602)1875, Proj. 6185 (AFSWC TDR 61-99). 38p.

571. (AD-260-978L) A3D CORROSION PROGRAM. Bimonthly Report No. 1, 27 Mar. - 1 June 1961. E. C. Potere and D. J. Watts (Douglas Aircraft Co., Inc., El Segundo, Calif.). 8 June 1961. Contract NOa(s) 59-0150-i. 17p.

572. (AD-208-114L) QUALIFICATION TEST OF ISOTOPE PRODUCTS, LTD., MONTREAL, P. Q., CANADA, EXITIBITOR; GAMMA-RAY (IRIDIUM-192 AND COBALT-60) RADIOGRAPHY OF STEEL. Final Report. Material Lab., New York Naval Shipyard, Brooklyn. 29 May 1958.

573. (AD-159-769) QUALIFICATION RETEST OF PHILBRICK-BOOTH AND SPENCER, INCORPORATED, HARTFORD, CONNECTICUT, EXHIBITOR: GAMMA-RAY (COBALT-60) RADIOGRAPHY OF STEEL. Final Report. Material Lab., New York Naval Shipyard, Brooklyn. 30 Dec. 1957. 3p.

574. (AD-203-009L) SUPPLEMENTARY QUALIFICATION TEST OF FOSTER WEELER CORPORATION, CARTERET WORKS, CARTERET, NEW JERSEY, EXHIBITOR: GAMMA-RAY (CO-60 AND RADIUM) RADIOGRAPHY OF STEEL. Final Report. Material Lab., New York Naval Shipyard, Brooklyn. 29 May 1958. 2p.

575. (AD-119-381) QUALIFICATION TEST OF THE KEMALLOY CORPORATION, SHREVEPORT, LOUISIANA ON THE GAMMA-RAY (COBALT-60) RADIOGRAPHY OF STEEL. Final Technical Report. Material Lab., New York Naval Shipyard, Brooklyn. 15 June 1956. 6p.

576. (AD-119-321) QUALIFICATION TEST ON THE GAMMA-RAY (COBALT-60) AND X-RAY RADIOGRAPHY OF ALUMINUM, BRASS AND STEEL, SUBMITTED BY UNIVERSAL TECHNICAL TESTING LABORATORIES, INC., HAVERTOWN, PENNSYLVANIA. Final Technical Report. Material Lab., New York Naval Shipyard, Brooklyn. 1 Mar. 1956. 12p.

577. (AD-272 989) Feltman Research Labs., Picatinny Arsenal, Dover, N. J. A RADIOTRACER NON-DESTRUCTIVE TEST FOR THE PRESENCE OF FOUR SPRINGS IN A SEALED T1029 E2 FUZE ASSEMBLY. by Cecil G. C. White, James W. McCahill, and Richard J. Graybush. June 1961, 7p. incl. table. (Technical note no. FRL-TN-76).

578. (AD-268 959) Aberdeen Proving Ground, Md. APPLICATION OF A COBALT-60 SOURCE TO THE SOLUTION OF ORDNANCE RADIOGRAPHIC PROBLEMS, by R. L. Huddleston. Dec. 1961, 21p. incl. illus. 3 refs. (Rept. no. DPS-395).

579. (AD-264 888) Norwegian Defence Research Establishment. RESEARCH IN SELF-DIFFUSION IN LIQUIDS. THE MANUFACTURE OF MAGNETIC MICROFLOATS FOR DENSITY MEASUREMENTS, by B. Ottar and W. Sands. 23 May 1961, 17p. incl. illus. (Technical rept. no. 2). (Contract AF 61(052)343; In cooperation with Aeronautical Research Lab., Wright-Patterson Air Force Base, Ohio) (ARL-162).

580. (AD-264 534) Office of Naval Research, London. PRODUCTION AND APPLICATIONS OF RADIONUCLIDES IN FRANCE, by E. R. Tompkins. 3 Aug. 1961, 7p. 30 refs. (Technical rept. no. ORNL-70-61).

581. (AD-263 030) Committee on Ship Structure, National Research Council, Washington, D. C. THE FEASIBILITY OF X-RAY INSPECTION OF WELDS USING BACK SCATTERED RADIATION. Final rept., by E. L. Criscuolo, C. H. Dyer, and D. P. Case. 28 July 1961, 26p. incl. illus. tables (Serial no. SSC-132) (In cooperation with Naval Ordnance Lab., White Oak, Silver Spring, Md.).

582. (AD-261 550) Plastics Technical Evaluation Center, Picatinny Arsenal, Dover, N. J. THE APPLICATION OF NONDESTRUCTIVE TESTING TO PLASTICS, by Alfred M. Anzalone. July 1961, 39p. (Plastec note no. 1).

583. (AD-260 999) Kaman Aircraft Corp., Bloomfield, Conn. DEVELOPMENT AND FABRICATION OF NON-DESTRUCTIVE SPECIFIC GRAVITY MEASURING EQUIPMENT EMPLOYING RADIATION TECHNIQUE. Monthly progress rept. 1-30 April 1961. Apr. 1961, 3p. (Rept. no. 58-92-PR-32) (Contract DA 19-059-501-ORD-2631, Proj. TA2-8051).

584. (AD-260 998) Kaman Aircraft Corp., Bloomfield, Conn. DEVELOPMENT AND FABRICATION OF NON-DESTRUCTIVE SPECIFIC GRAVITY MEASURING EQUIPMENT EMPLOYING RADIATION TECHNIQUE. Monthly progress rept. 1-31 March 1961. March 1961, 6p. incl. illus. (Rept. no. 58-92-PR-31) (Contract DA 19-059-501-ORD-2631, Proj. TA2-8051).

585. (AD-256 916) Electro-Optical Systems, Inc., Pasadena, Calif. ENERGY CONVERSION SYSTEMS REFERENCE HANDBOOK. VOLUME XI. RADIOISOTOPE SYSTEM DESIGN. Sept. 1960, lv. incl. illus. tables, 147 refs. (EOS rept. no. 39C-Final, Vol. II). (Contract AF 33(616)6791, Proj. 4769). (WADD TR 60-699, Vol. II).

586. (AD-209 974) Armament Research and Development Establishment (Gt. Brit.). THE RADIOGRAPHY OF WELDED PLATES FROM 2 TO 4 INCHES THICK. A NOTE ON THE COMPARATIVE SENSITIVITIES OBTAINED USING 400 kV X-RAYS, COBALT 60 GAMMA RADIATION AND 5 MeV X-RAYS, by R. Halmshaw and C. G. Pollitt. Dec. 1958, 5p. incl. illus. tables (ARDE Memo no. MX 78/58; [JSRP Control no. 581777]).

587. (AD-161 884) Pitman-Dunn Labs. Group, Frankford Arsenal, Philadelphia, Pa. RADIOTRACER STUDY OF THE EFFECT OF LUBRICANTS ON METAL TRANSFER IN DRAWING BRASS, by C. Fisher, A. Shapiro and others. Dec. 1957, 18p. incl. illus. tables, 14 refs. (Proj. no. TB5-1510; Rept. no. R-1423).

588. (AD-159 180) Naval Ordnance Lab., White Oak, Md. THE INVESTIGATION OF RADIOISOTOPES FOR THE INSPECTION OF SHIP WELDS, by E. L. Criscuolo, D. P. Case, and D. Polansky. Progress rept. no. 1. 28 Feb. 1958, 57p. incl. illus. tables, 11 refs. (Serial no. SSC-110).

589. (AD-156 563) Office of Naval Research, London. SOLID METALLIC DIFFUSION AND METALLURGY PAPERS AT THE INTERNATIONAL CONFERENCE ON RADIOISOTOPES, PARIS, 1957, by Oleg D. Sherby. 18 Oct. 1957 (Technical rept. no. ONRL-123-57) (In cooperation with Paris U.).

590. (AD-148 434) Industrial Test Lab., Philadelphia Naval Shipyard, Pa. INVESTIGATION OF THE RADIOGRAPHY OF ALUMINUM USING IRIDIUM 192, by T. F. Boyd and M. Galan. Nov. 1957 [14]p. incl. illus. tables (ITL Research and Development rept. no. 6200E-5).

591. (AD-146 045) Office of Naval Research, London. UNESCO INTERNATIONAL CONFERENCE ON RADIOISOTOPES IN SCIENTIFIC RESEARCH, PARIS, 9-20 SEPTEMBER 1957, by John W. Irvine, Jr. 29 Oct. 1957, 14p. (Technical rept. no. ONRL 125-57).

592. (AD-129 396) Material Lab., New York Naval Shipyard, Brooklyn. THE APPLICATION OF RADIOISOTOPES TO THE NON-DESTRUCTIVE TESTING OF FIBER GLASS REINFORCED PLASTICS, by J. L. Kalinsky and S. Di Lauro. 28 Feb. 1957, 1v. incl. illus. tables (Lab. proj. no. 5319-14).

593. ABSTRACTS OF THE PAPERS PRESENTED AT THE 2nd JAPAN ISOTOPE CONFERENCE, FEBRUARY 4-6, 1958. [Tokyo], Japan Atomic Industrial Forum, 1958. 262p. Atomic Industrial Forum, New York, N. Y.

594. THE ACTIVATION OF PISTON RINGS OF AN ENGINE WITH RADIOACTIVE ZINC, BY THE METHOD OF HOT ZINC PLATING. (AKTIVIROVANIYE PORSHNEVYKH KOLETS DVIGATELYA RADIOAKTIVNYM TSINKOM SPOSOBOM GORYACHEGO TSINKOVANIYA). V. I. Golov. Avtomobil. i Traktor. Prom. Nr 12, 39-40(1958).

595. APPLICATION OF RADIOISOTOPES FOR AUTOMATIC FINISHING. B. L. Lakatosh. Derevoobrabatyvayushchaya Prom. 7, No. 10, 15(1958). (In Russian)

596. Technical Information Service Extension, AEC. BIBLIOGRAPHY ON USES OF RADIOACTIVE AND STABLE ISOTOPES IN INDUSTRY. A List of Selected References. J. A. McCormick, comp. July 1957. 27p. (TID-3511) (OTS).

597. DETERMINATION OF THE THICKNESS OF STEEL BY DIFFUSED GAMMA RADIATION. (OPREDELENIYE TOLSHCHINY STALI PO RASSEYANNOMU GAMMAIZLUCHENIYU). L. Ya. Bambe, Z. E. Pelekis, and L. L. Pelekis. Tr. In-ta fiz. AN LatvSSR 10, 91-101(1957).

598. DETERMINING SOIL DENSITY BY RADIOISOTOPES. A. A. Vasilenko and P. V. Savich. Dopovidi Akad. Nauk Ukr. R.S.R. No. 4, 372-5(1958). (In Ukrainian with English and Russian summaries).

599. FASTER PIPE-WELD TESTING USES Ir^{192}. Staff Written. Nucleonics 17, No. 1, 98-9(1959).

600. FLOW INVESTIGATIONS IN RESERVOIRS WITH RADIOACTIVE ISOTOPES. A. Montens. Umschau 58, No. 15, 459-61(1958). (In German).

601. GAMMA DETECTION OF FLAWS BY A SCINTILLATION COUNTER. A. A. Arkhangel'skii. Sbornik Leningrad. Inst. Inzhenerov Zheleznodorozhnogo Transporta 158, 186-96(1958). (In Russian).

602. GAMMA-RAY GAGE FOR MEASURING THICKNESS. S. N. Dediukov. Rechnoi Transport 17, No. 7, 29-31(1958). (In Russian).

603. GAMMA RAYS + X-RAY FILMS = A NEW WAY TO DETECT CORROSION. E. G. Pauschenwein and P. C. Trounce. Oil Gas J. 56, 64-6(1958).

604. A GAMMA-SCATTERING SOIL DENSITY GAUGE FOR SUBSURFACE MEASUREMENTS. J. F. Cameron and M. S. Bourne. Intern. J. Appl. Radiation and Isotopes 3, 15-9(1958).

605. Office of Industrial Development, AEC. GROWING INDUSTRIAL USES OF RADIOISOTOPES. Paul C. Aebersold. p.65-74 [of] FIFTH INTERNATIONAL CONGRESS AND EXHIBITION OF ELECTRONICS AND ATOMIC ENERGY, ROME, ITALY, JUNE 16-30, 1958. (U. S. Papers). 10p. (TID-7557).

606. INDUSTRIAL APPLICATION OF RADIOISOTOPES AND THEIR INDUSTRIAL IMPORTANCE. George Manov. Bull. Inform. Assoc. belge develop. pacifique energie atomique No. 16, 11-17(1958) Sept.

607. INDUSTRIAL APPLICATIONS OF RADIOISOTOPES, NUCLEAR LIQUID LEVEL GAUGES. Stelios Regas. J. Soc. Non-Destructive Testing 16, 493-4(1958).

608. (INDUSTRIAL RADIOLOGY). (Bibliography). Herbert R. Isenburger. St. John X-Ray Laboratory, Califon, N. J. 1942-1958.

609. INDUSTRIAL USE OF RADIO-ISOTOPES. Alan B. Lillie. pp.167-99 in "Proceeding of the Scientific Congress, Nuclear Sessions, July 2-6, 1956, 3rd. Electronic-Nuclear International Review." Rome, National Committee for Nuclear Research, 1956. 447p.

610. INDUSTRIAL USES OF RADIOISOTOPES. Studies in Business Policy, No. 87. New York, National Industrial Conference Board, Inc., 1958. 88p.

611. LEAK DETECTION IN WATER PIPELINES WITH RADIOACTIVE TRACERS. J. K. Basson. Atomics and Energy, Suppl. to Ind. Rev. Africa, July(1958).

612. NEW APPLICATIONS OF RADIOELEMENTS AND OF RADIATION TO INDUSTRY. P. Leveque. Energie nucleaire 2, 67-72(1958).

613. A NEW RADIOACTIVE TECHNIQUE. Staff Written. Oil Gas J. 56, 51(1958).

614. NUCLEAR IRRADIATION AND RADIOISOTOPES IN METAL RESEARCH. Massoud T. Simnad. Intern. J. Appl. Radiation and Isotopes 1, 145-71(1956).

615. A RADIOACTIVE DEPOSIT GAGE FOR ENGINES. B. A. Fries, J. G. Mingle, and H. W. Sigworth. Intern. J. Appl. Radiation and Isotopes 1, 270-5(1957).

616. PROBLEMS OF THE ECONOMICAL EFFECTIVENESS OF THE USE OF RADIOACTIVE ISOTOPES IN MACHINE CONSTRUCTION AND MACHINING OF METAL. (VOPROSY EKONOMICHESKOY EFFEKTIVNOSTI PRIMENENIYA RADIOAKTIVNYKH IZOTOPOV V MASHINOSTROYENII I METALLOOBRABOTKE). V. A. Letenko and V. I. Postnikov. Mashinostroitel' Nr 10, 36-40(1958).

617. PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON THE PEACEFUL USES OF ATOMIC ENERGY, HELD IN GENEVA, AUGUST 8-20, 1955. VOLUME 15. APPLICATIONS OF RADIOACTIVE ISOTOPES AND FISSION PRODUCTS IN RESEARCH AND INDUSTRY. New York, United Nations, 1956. 327p.

618. RADIOACTIVE TRACER TECHNIQUES FOR SAND AND SILT MOVEMENTS UNDER WATER. J. L. Putman and D. B. Smith. Intern. J. Appl. Radiation and Isotopes 1, 24-32(1956).

619. REDUCING STATIC ELECTRICITY INSIDE STORAGE TANKS BY USE OF RADIOACTIVE MATERIAL. Here is a progress report on laboratory and full-scale experiments using strontium-90 - yttrium-90 as the radioactive source. J. J. Conradi, J. R. Miller, and J. J. Skelly. Oil Gas J. 55, 197-203 (1957).

620. SYMPOSIUM ON RADIOISOTOPES. PRESENTED AT THE SECOND PACIFIC AREA NATIONAL MEETING, LOS ANGELES, CALIF., SEPTEMBER 21, 1956. ASTM Special Technical Publication No. 215. Philadelphia, American Society for Testing Materials, 1958. 96p.

621. USE OF RADIOACTIVE GASES FOR LOCALIZATION OF LEAKAGES IN CABLE SHEETS. G. Tidau. Atompraxis 5, No. 1, 26-7(1959). (In German with English and French summaries).

622. THE USE OF RADIOACTIVE INDICATORS FOR THE INVESTIGATION OF CORROSION INHIBITION BY AN EXTERNALLY APPLIED CURRENT. (PRIMENENIYE RADIOAKTIVNYKH INDIKATOROV DLYA ISSLEDOVANIYA TORMOZHENIYA KORROZII NALOZHENNYM IZVNE TOKOM). A. I. Levin and V. I. Falicheva. Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya Nr 1, 32-5(1958).

623. THE USE OF RADIOACTIVE ISOTOPES FOR DETERMINING SATURATED VAPOUR PRESSURE. H. Nesmeyanov. Intern. J. Appl. Radiation and Isotopes 4, 16-29(1958).

624. USE OF RADIOISOTOPES IN FILLER METAL FOR NONDESTRUCTIVE INSPECTION. Paul T. Barnes and Gordon L. Locher. Welding J. (N. Y.) 37, 1176-81 (1958).

625. USE OF RADIOISOTOPES IN HYDROLOGY. I. METHOD FOR THE DETERMINATION OF FLOW AND DISCHARGE OF WATER STREAMS. Heribert Moser and Ferdinand Neumaier. Atomkern Energie 2, 26-9(1957).

626. USING RADIOISOTOPES IN WOOD TESTING. A. P. Bersenev and A. G. Fokina. Derevoobrabatyvayushchaya Prom. 7, No. 8, 11-13(1958). (In Russian).

627. (TID-4563(3rd Rev.)) SPECIAL SOURCES OF INFORMATION ON ISOTOPES IN INDUSTRY, AGRICULTURE, MEDICINE AND RESEARCH. U. S. Atomic Energy Commission Division of Isotopes Development, 1962.

628. (TID-3519) UTILIZATION OF RADIOISOTOPES IN PHYSICAL AND BIOLOGICAL SCIENCES - GENERAL TOPICS. A LITERATURE SEARCH. J. A. McCormick, 1959.

629. (TID-3539) INDUSTRIAL APPLICATIONS OF RADIOISOTOPES AND ASSOCIATED TECHNIQUES. A LITERATURE SEARCH. R. L. Scott, U. S. Atomic Energy Commission Technical Information Service, Nov. 1959.

630. (TID-3079) INDUSTRIAL USES OF ISOTOPES, CHEMICAL REACTION MECHANISMS AND KINETICS, AND RADIOCHEMISTRY. A SELECTED LIST OF REFERENCES. J. A. McCormick, U. S. Atomic Energy Commission Technical Information Service, Sept. 1959.

631. (TID-3815) INFORMAL LISTING OF BIBLIOGRAPHIES OF ATOMIC ENERGY LITERATURE WITH CLASSIFIED REFERENCES. BIBLIOGRAPHIES ISSUED OR IN PROGRESS DURING THE PERIOD, DECEMBER 1962 - JANUARY 1963. U. S. Atomic Energy Commission Division of Technical Information Extension.

632. (TID-3046) UTILIZATION OF GROSS FISSION PRODUCTS. A BIBLIOGRAPHY OF UNCLASSIFIED REPORT LITERATURE. G. A. Young, U. S. Atomic Energy Commission Technical Information Service, Feb. 1954.

633. (TID-3046 (Suppl. 1)) UTILIZATION OF FISSION PRODUCTS. A BIBLIOGRAPHY OF SELECTED UNCLASSIFIED LITERATURE. G. A. Young and R. E. Allen, U. S. Atomic Energy Commission Technical Information Service, June 1955.

634. (TID-3046 (Suppl. 2)) RADIATION APPLICATION AND FISSION PRODUCT UTILIZATION. A BIBLIOGRAPHY OF SELECTED UNCLASSIFIED LITERATURE. G. A. Young, U. S. Atomic Energy Commission Office of Isotopes Development, July 1959.

635. (TLW-1055) A SURVEY AND RECOMMENDATIONS FOR RADIOISOTOPE APPLICATIONS PERTINENT TO THE U. S. NAVAL CIVIL ENGINEERING LABORATORY OPERATIONS. L. V. Beaufait, Jr. and J. Kohl, Tracerlab, Inc., Reactor Monitoring Center, 2030 Wright Avenue, Richmond 3, California., Rev. 10 Aug. 1959.

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